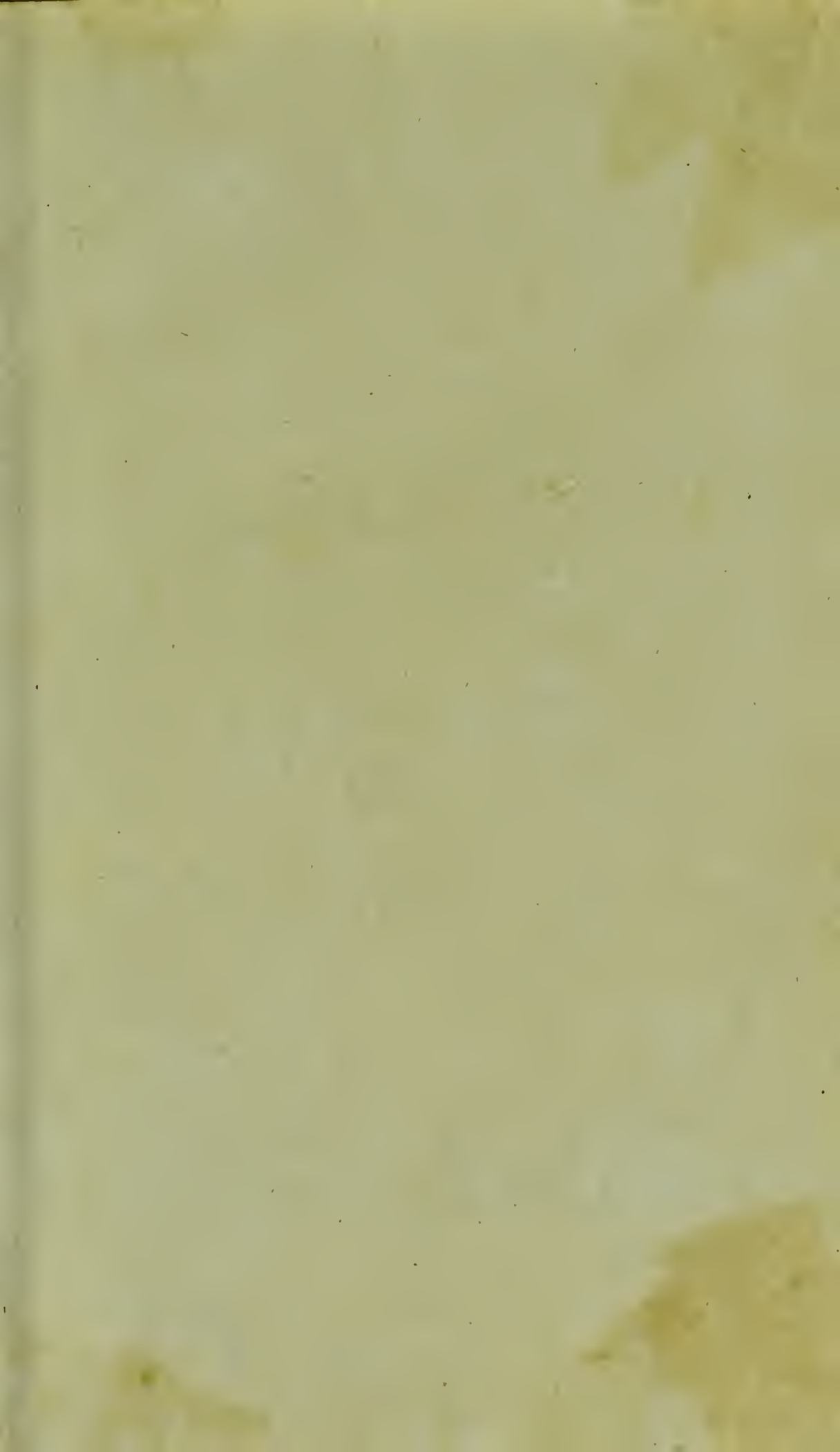


TV. 124^B

44857/A





A
TREATISE
ON
Putrid, Malignant, Infectious Fevers;
AND
HOW THEY OUGHT TO BE TREATED;
FOUNDED ON NEARLY
Fifty Years practical Experience:
WITH AN
EXPOSURE OF SOME FATAL MEDICAL ERRORS
IN THESE DREADFUL DISEASES.

To which is added,
THE IMPORTANT USE OF THE
GUN-SHOT SETON NEEDLE,
TO PREVENT CUTTING AND
PRESERVE THE INTEGUMENTS IN
GUN-SHOT WOUNDS, &c. &c.

By W. ROWLEY, M. D.

Member of the University of Oxford, the Royal College of Physicians in London, Physician to the St. Mary-le-bone Infirmary, and public Lecturer on the Theory and Practice of Medicine, rejecting false Systems; founded on the published truths in *Schola Medicinæ Universalis Nova*, &c. &c.

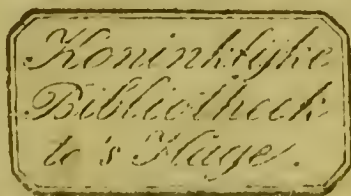
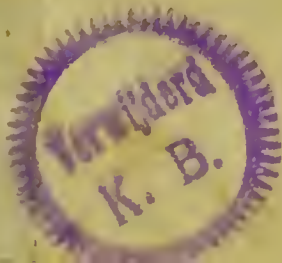
LONDON.

PRINTED BY J. BARFIELD, WARDOUR-STREET,

Printer to His Royal Highness the Prince of Wales.

Sold by J. HARRIS, corner of Ludgate-Hill; MURRAY, Fleet-Street; Cox, in the Borough; and all Booksellers in Town, or Country.

1804.





CONTENTS.

	PAGE.
I. INTRODUCTION to a knowledge of putrid, malignant infectious fevers, the plague, &c. with the means by which the author obtained his intelligence, &c. in hot climates	1
II. Distinctions ascertained between inflammatory and putrid diseases for the purposes of practice; how opposite in causes, and how opposite ought to be their cure	9
III. Practical facts and just reasoning, drawn from the art of surgery in mortifications and pestilential livid spots, carbuncles, &c. proving that physicians should imitate the practice of early applying <i>antiputrescents</i> , and avoid <i>bleeding</i> , <i>salts</i> , &c. which no skilful surgeon prescribes in mortifications, &c.	13

TREATISE ON PUTRID DISEASES, &c.

	PAGE.
IV. Some ideas of the destructive effects of the putrid malignant fevers of Spain, Leghorn, Gibralter, &c. - -	1
V. What are to be considered putrid diseases	3
VI. The manifest causes of putrid, malignant, spotted, purple, jail fevers, &c. -	3
VII. Of the effects of those visible causes in the human constitution. In the nervous, vital, and natural functions - -	6
VIII. Symptoms, or signs of putrid infectious, malignant fevers - -	8
IX. Symptoms in the animal functions, or brain and nervous symptoms; where all sensations and first causes of irritability originate	9
X. Symptoms, or signs, in the vital functions, dedicated to the circulation of the blood, and respiration, or breathing -	10
XI. Symptoms, or signs in the natural functions, destined to mastication, deglutition, digestion, chymification, sanguification, nutrition, secretions and excretions, &c. &c.	13

XII. Symp-

CONTENTS.

iii

	PAGE
XII. Symptoms of the putrid ulcerated sore throat, scarlet fever, &c. -	16
XIII. Symptoms of the putrid yellow fever of the East and West Indies, America, in the Southern parts of Africa; and putrid purple spotted fever of Spain, Gibralter, Leghorn, &c. pestilential fever, or plague, &c. - - -	18
XIV. Distinguishing characteristics of putrid malignant fevers; so as to know them from all other fevers and diseases -	19
XV. Of the prognostics, or a foresight of the general event or fatal effects of putrid diseases, if not checked in the first stages—bad and good practices considered, at Philadelphia, and other places in America, Spain, &c. containing a general criticism on errors, &c. - -	22
XVI. The success attending judicious treatment - - -	27
XVII. Dissections of those, who have died of putrid diseases, with inferences of what ought to have been adopted to prevent fatality. Observations made at the Ha-	

vanna

	PAGE
vanna, in 1762, and before and afterwards, in all the West India Islands, South America, &c. &c. Pensacola, St. Augustine, Georgia, South Carolina, &c. -	28
What appeared in the brain—thorax—abdomen. How the dissections were conducted, to prevent infection, as practiced by myself, &c. - - -	31
PREVENTION of putrid malignant yellow fevers, plague, &c. and just indications of cure from this true intelligence -	33
The general treatment of putrid malignant fevers, so as to form, as far as the power of the medical art extends, rational expectations of success. Nausea and bilious, or other vomitings. - - -	39
Antiseptics, or antiputrid remedies. What? and the general modes of application	42
FORMULÆ MEDICAMENTORUM, or prescriptions for the use of juvenile practitioners, &c. antiseptic laxatives—resisters of putridity—remedies to correct purgings, &c. Drinks, &c. - - -	45

CONTENTS.

PAGE.

Account of the success of curing putrid scarlet fevers, &c. at the St. Mary-le-bone Infirmary, where we lost but *two* in between 400 and 500, and not above six or eight in 100, of the most dangerous putrid, purple, spotted, malignant fevers. Structure of our St. Mary-le-bone Hospital, to exclude infectious particles in putrid diseases - - - 53.

An enquiry into the causes of deaths in Spain, Italy, Gibralter, &c. chiefly owing to erroneous doctrines and practice, and how to be remedied. Dreadful effects of *bleeding, neutral salts, nitre, &c.* 56

Other errors in physic, from wanton projects of inexperience, artifice, or design, false systems, speculations, &c. - 57

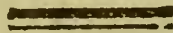
Erroneous and successful practices arranged, medical and domestic, &c. Foods, &c. and remedies necessary in putrid, malignant gangrenous complaints, &c. &c. 61

IMPROVED TREATMENT OF GUN-SHOT WOUNDS.

I. Use of the gun-shot seton needle, invented by the author - - - 69

II. Brief

	PAGE.
II. Brief observations on gun-shot wounds, &c. in military and naval warfare. External and internal treatment. -	70
III. On dilating in gun shot wounds -	82
IV. Some objections to dilating, or cutting freely in gun-shot wounds -	83
V. On the gun-shot seton probe, and its use	87
VI. A comparative view of the old methods of treating gun-shot wounds, with the pre- sent new modes - -	91
VII. Public medical schools necessary	94
VIII. Military card, for preserving the health of the army volunteers, &c. regarding dress, foods, and conduct -	97



ON THE PESTILENCE OR PLAGUE.

A. Irrationality of numerous authors	102
Some view of ancients and moderns. Treatment, in general, erroneous in the extreme - -	106

II. Plans

CONTENTS.

vii

PAGE

II.	Plans of Dr. Carmichael Smith, and M. Morveau, for purifying hospitals, ships, jails, and apartments	-	111
III.	Unless more rational modes of treating the plague, than has hitherto been adopted, be put in practice, human beings must be continually sacrificed		111
IV.	A comparative view of fatal and prosperous practice in putrid fevers, &c. with the horrid scenes at Cadiz, Gibraltar, &c.	- - -	112
	Travels of the author through Europe, and hot climates, with observations, &c.		116
V.	<i>Putrid phrenzy</i> discovered by the author, and how treated at the St. Mary-le-bone Infirmary, successfully—small pox with purples	- - -	117
VI.	Errors exhibited in rotation of most medical authors, a few excepted, in the treatment of putrid infectious fevers, &c. and what ought always to be observed	- - -	120
VII.	Conclusion	- -	129

ERRATA.

Page 12, line 11,	crasis.
— 16, —	16, vertigo.
— 21, —	9, characteristic.
— 29, —	1, Mindereri.
— 46, —	19, it is not an antiseptic purgative.*
— 47, —	16, gtt
— 48, —	16, coch.
— 51, —	19, a gravis on bène.
— 54, —	2, 11 June, 1792.
— 62, —	8, Mindereri.
— 106, —	20, Devizen.
— 114, —	21, Mindererus's.

* The purges have been introduced out of compliance to some practitioners of respectability; but I never used them, therefore cannot be responsible for their efficacy. Indeed, lately some practitioners have become *calomel mad*, and boldly give it in all cases; and though I was one of the first who united *calomel*, and *James's Powder*, in 1761, for *pleurisy*, *peripneumony*, *rheumatism*, &c. with great success, I have always doubted their use in putrid diseases, though beneficial in small doses, in liver complaints, &c. but large doses of *calomel* have been rejected by all skilful surgeons for many years, in venereal complaints, from the injuries done to the constitutions. See my Treatise called *Cogent Reasons against all rough Practices in venereal affections*, with prescriptions in all cases, &c. &c.

In the doctrines of mineral acids, I can affirm, that the *MURIATIC*, or *NITROUS*, are quite inefficacious in putrid diseases, when compared with the *sulphuric* or *vitriolic acid*. The former are very useful in baths for the *gout*. See my Treatise.

INTRODUCTION

TO A

KNOWLEDGE

OF

Putrid, malignant, infectious Fevers.

A DISCRIMINATING power in the human mind to treasure up true and important ideas, and, to reject the false, doubtful, and frivolous, constitute the seeds of wisdom for contemplative and active life. It is easy to swim with the stream, or follow the wavering, unreflecting multitude; but most arduous, ungrateful, and difficult to explore errors, stem the torrent of violent and rooted prejudices, and become a leader of truth, instead of a servile adulator of plausibilities and falsehoods. To know fatal professional errors, and not attempt to correct them, is impious and profane, and merits the indignation of all human society.

4 *Introduction to a Knowledge of*

It is now above *fifty years*, that the improved treatment in putrid, yellow, and other malignant diseases made its appearance.

In London the humane DR. FOTHERGILL had decried *bleeding* and *antiphlogistics* in *putrid scarlet fever* and *sore throat*, and proved, by *successful practice*, the enormities of all preceding doctrines, ancient or modern.

In the West Indies, admirable and successful methods of treating the most dangerous *putrid* and *contagious* fevers were well known, and practised in the *seven years war*, by several Army and Navy surgeons; except, when government sent out European physicians at the head of a medical staff, who knew nothing of transatlantic *putrid acute fevers*; and, who were too arrogant to receive information, or instruction, from many experienced, practical, and learned men of that time, who had made those dreadful disorders their study, and who had, by their diligence and sensible observations, discovered some striking BOERHAAVIAN *errors*, and instituted many important *improvements*.

At Jamaica, in 1762, I obtained the first rudiments of successfully treating the most violent acute *putrid* complaints, from that very amiable and learned practical physician, DR. JACKSON of Port
Royal

Royal hospital; who rejected *bleeding* and *antiphlogistic coolers*, and prescribed decided *antiseptics*, without *mixed practice*.

At the *Havanna*, afterward, I had the mortification to see the *Boerhaavian depleting* and *nitrous* practices prove destructive to many, while the antiseptic plan, under more skillful artists, cured numbers.*

The art has teemed with descriptions of *putrid fevers*, both ancient and modern, and they all partake of the general symptoms; all arise from the same source. *Putrid particles* contaminating the blood; putrid particles, or *miasmata* communicated from the infected to others in succession.

Whether contagious diseases arise in *Asia, Africa, America*, or *Europe*, as their origin is the same, their treatment should be similar; except, that in the *hottest climates*, the most *powerful antiseptics* should be administered, oftener, than in the more temperate regions. This, my own experience has amply confirmed.

a 3

My

* During the siege *dead bodies*, without *shot*, were thrown into the sea, both by *Spaniards* and *English*, which floating ashore, at a certain period, contaminated, or was said to contaminate the surrounding air with putrefactive particles, productive of yellow and other fevers, diarrhoea, dysentery, &c.

My sensible and esteemed friend DR. VAGE, has written on the SENEGAL FEVER. What this learned and skilful practitioner said above forty years ago, merits the most serious attention :* it is founded in accurate observation, real practical experience, and an animated desire to serve the army and society.

After enumerating the most dreadfully acute putrid symptoms in that fiery region ; he says :—
 “ The loss of eight or ten ounces of blood in the first
 “ attack ; *has sunk the pulse* beyond a possibility of
 “ raising it afterwards, and that even in *plethoric*
 “ habits, attended with great pains in the head, &c.
 “ It is indeed, surprising how little these fevers
 “ will bear *evacuations* of any kind, especially
 “ BLEEDING.

“ It is of great consequence to *keep up the pulse* ;
 “ but here the *cordial medicines* are ineffectual ; get
 “ decoction of the bark, with camphorated julep,
 “ and spirit of vitriol, these answer this purpose
 “ effectually, so as to render any *other* medicines
 “ unnecessary,

* Published in Brookes's practice of physic. This skilful surgeon, I believe, is attached to the Northampton Militia ; he should have been the head of a medical STAFF, as should all the old navy and army surgeons of respectable sober character, not superannuated !

“ unnecessary, except occasionally a gentle emetic,
“ or laxative.”

Here are the sentiments of a penetrating discerning practitioner, and his observations and successful practice are more valuable to society, than a thousand fine spun or *useless hypotheses* of the medical schools; as one grain of *real experience*, whatever young inexperienced practitioners may think, is worth a million of the most plausible false reasonings that ever issued from the mind of man !

This excellent army surgeon was in the captured *French West India Islands*, and acquired the highest reputation for a successful practice. He was the most intimate companion of my early life, and certainly confirmed, by incontrovertable proofs, the suggestions I had then formed from my own actual observations, and from the best intelligence I could acquire in those burning regions.

The war ended. The *Havanna* was given up to the Spaniards, June 6, 1763, a day or two after, we sailed under Admiral Keppell, and I accompanied the troops to take possession of *St. Augustine*, in *Florida*, and arrived in London, about the September following.

I pursued the studies in London, all the winter; but early in 1764, in the spring, I was earnestly solicited to go out in His Majesty's packet, the *Grenville*, apparently as surgeon; but added to this office, I had a private mission of a political nature.

In this voyage, we went to *Barbadoes, Grenades*, where there had been a great mortality from the *putrid yellow fever*; *Dominique, St. Kitts, Antigua, Jamaica, Cuba, Pensacola, St. Augustine, Georgia, Charlestown, South Carolina*, where I improved from DR. CHALMERS and others, &c.*

In this extensive voyage, I repeated my enquiries and investigations, and obtained every possible information concerning the merciless and fatal diseases of *hot climates*. From all which, being convinced, by numerous facts, and the most authentic testimonies of many excellent practitioners, with whom I conversed, that putrid diseases had been always ill-treated in Europe, by *bleeding*, &c. I was determined never to follow those *destructive* practices.

I settled in London in 1766; but have frequently made, in the summer, excursions through *France, Italy, Germany, Flanders, Holland*, &c. where I
always

* The year before I had been at *Martinique* and *Guadaloupe*, and perceived the errors of the *French* practice.

always found the physicians totally deficient in curing *putrid affections*; either in their public hospitals, or private practice; and fatality followed all their *bleeding, vomiting, purging, and nitrous cooling practices*.* No admonitions, no remonstrances, no humane offers to treat their patients according to our most skilful LONDON methods availed. The wretched were left to their fate under a *feeble* practice, or sacrificed at the shrine of error!

Physicians, who had long persevered in error, were too proud and self-important to be corrected; although the divine HIPPOCRATES, above two thousand years ago, gave them a notable example, worthy of imitation.



DISTINCTIONS BETWEEN INFLAMMATORY AND
PUTRID DISEASES.

TWO distinct classes of *acute febrile diseases*, as *opposite as light to darkness*, in their original causes, produce *chilliness, nausea, vomiting, head ach, quick pulse, heat, thirst, &c.* namely, the true INFLAMMATORY, and the *malignant contagious putrid fevers*.

INFLAM-

* No wonder so many as forty or fifty thousand have perished in Spain.

INFLAMMATIONS, and *inflammatory true fevers* arise, generally from *sudden cold*, the body having been previously *heated*, or in a state of profuse perspiration, and are NOT CONTAGIOUS.

PUTRID INFECTIOUS MALIGNANT FEVERS originate from *putrefactive particles*, or *miasmata* in the *air*; or from *persons, cloaths, breaths, &c.* more or less, already infected: therefore are *contagious*.*

Nothing therefore can be clearer, or more intelligible to practitioners, than NON infectious, or *inflammatory*, and the real infectious, or PUTRID DISEASES.

All learned, skilful and experienced physicians, treat these *opposite* disorders, in a manner diametrically *opposite*.

INFLAMMATIONS.

Bleeding, saline purges, antimonials and calomel, diaphoretics, nitre, &c. and all *neutral salts, blisters, &c.* extreme abstinence, or cooling diet are successfully prescribed in INFLAMMATIONS.

PUTRID

* I use the word *contagious* or *infectious* in a similar sense; a disease that can be communicated from one person to another.

PUTRID MALIGNANT FEVERS, &c.

Antiseptic laxatives, bark, snakeroot, acid of vitriol, (sulphuric acid) wine in moderation, and pure air, are recommended, and a direct opposite treatment to the inflammatory is adopted.

What cure inflammations, do *irreparable mischief* in the *putrid*; and, what cure *putrid affections* would be equally injurious in the *inflammatory*, although *heat, quick pulse, nausea, vomiting, head-ach, &c.* are common in both.

It is the application of *anti-inflammatory remedies* to the truly *putrid, or putrefactive disorders*, that has murdered millions of human beings, and will continue without mercy, to destroy the human species, as long as such irrational and prejudiced practices are continued. This may be considered harsh language; but no asperity in words, no epithets, however gross or degrading, the English can express, is sufficiently severe, or adequate to the medical enormities daily practised in *putrid malignant and infectious diseases*.*

SECTS

* *Boerhaave is in toto erroneous. Cullen has a mixed practice, partly right, partly wrong. Brown scarcely merits serious attention, from men of science and experience, except that his errors have proved destructive to an incalculable number of human beings.*

SECTS and *sectarists*, hypothetical, false preceptors ; unsuspicious, credulous, unthinking students, all merit a certain degree of censure, for the errors committed in various *warm* regions, by novel projects. The former for daring, through a love of singularity and variety, to promulgate vain idle projects and experiments of *bleeding*, *calomel* and *jalap*, or *opium*, *brandy*, and a profusion of *wine* ; or *bark*, *bleeding* and *nitre* in the same breath, in opposition to established and confirmed EXPERIENCE :—the latter for not studying, and relying on those excellent writers, who were experienced practitioners, whose wise precepts, if attended to, would have saved thousands of innocent victims sacrificed within a few years to inexperience, wanton fancy, or thoughtless juvenile impetuosity.*

* SOME IDEAS OF OPPOSITE DISEASES.

*Inflammatory.**Putrid.*

Phrenitis inflammatoria.	Phrenitis putrida.*
Catarrh.	Scarlatina anginosa.
Ophthalmia vera.	Angina putrida.
Angina inflammatoria.	Febris petechialis.
Peripneumonia vera.	——flava putrida.
Pleuritis vera	——nervosa putrida.
Paraphrenitis vera.	——Americana.
Peritonitis.	Omnes morbi gangrenosi.
Nephritis.	Variolæ confluentes.
Cystitis, &c. &c. to the number of 40.	Erysipelas putridum.

* See the description of this newly mentioned disease in my former works, &c.

Cure.

Bleeding and anti-phlogistics.
Saline remedies, diaphoretics.

Cure.

Antiseptic laxatives, and all antiseptics, wine, bark, and pure air, &c.

The trust reposed in a physician is of a most sacred nature ; it is impiety not to fulfil it to the utmost extent of human intellectuals.

When a *dreadful fatality* prevails ; it should awaken the apprehension of error in the modes of treatment ; for where *thousands perish*, it does not demonstrate any great skill in the prescriber ; but where thousands are *SAVED*, it does the highest honour to the art.

If it be proved, that thousands are destroyed by the *mal-practices* ; and as many preserved by *judicious treatment*, which ought practitioners to follow ? This has been written above thirty years ago, both by myself and others,* and published for the benefit of all society, and the modes prescribed, are strictly adhered to, by some of the most celebrated and skilful practitioners in LONDON, with the utmost success.

b

If

* See Medical Advice to the Army and Navy. The Treatise on the putrid ulcerated Sore Throat and Malignant Fever. The *causes* of deaths in putrid diseases ; all now in the rational practice of physic. A singular cure is there exhibited of the highest stage of putrid infection, &c.

If, however, the many thousands cured of the most malignant ulcerated sore throats and petechial fevers, by *antiseptics*, and by avoiding refrigerents, &c. could have no weight with the obstinate and prejudiced; some important intelligence may be extracted from the art of surgery. — No practitioner who is acquainted with that practical art, can deny the similarity of external gangrenes and mortifications, which by absorption often produce *petechial fevers*, and the contagious particles received by the lungs, &c. causing *malignant petechial fevers*. The former is a more *partial* state of putridity; the latter more *universal*; but both require PROMPT ASSISTANCE OF PUTRIDITY.

Would any skillful surgeon give *jalap* and *calomel*, repeatedly, in a mortification, as Dr. Keel did?

Would he repeatedly bleed, when he saw livid appearances, and purple spots threatening gangrene, according to the same visionary?

Would he prescribe purging salts, compound camphire powder, or refrigerating mixt: or like *San Gracia* recommend, strenuously, bleeding for ever, and warm water in abundance, though he saw his patients all perish?

Would he expect, that *calomel* and opium given in the utmost extent, would check a spreading mortification?

No!

No ! no !—He would consider the questions an insult to his science, sense, and judgment.

SURGERY would *check* and *cure* the *gangrene* by large doses of *bark* in substance, *elixir* of *vitriol*, *spirituous bark tinctures*, *cordials* and *wine*, *pure air*, &c. &c.

Do these remedies often stop the progress and tend to *cure* *gangrene* ?

Every experienced surgeon would, without hesitation, answer in the *affirmative* ; and, I have seen in the most dreadful lacerated, and *gun-shot* wounds, both in Europe and *hot climates*, the excellent effects of these *antiseptic remedies*.

We can but succeed ; neither the art nor society require more ; then why ramble after visionary caprices, and risk the destruction of human beings either by the irrational revival of *old unsuccessful practices*, or unproved incongruous *novelties*.

The manner the most excellent surgeons have, for above half a century, successfully treated every tendency to *putridity*, merits the serious attention and imitation of every physician.

The causes of *putrid malignant fevers* and *gangrenes* are similar ; their *effects* are similar, as the
dissections

dissections hereafter delivered, prove ; let them be spiritedly attacked in a similar manner, and the success of curing *putrid affections*, in general, will be as frequent, as most other febrile diseases.*

The distinctions of *inflammatory* and *putrid* diseases, it is hoped, have been established. The opposite and most successful treatment of both elucidated. The absurdity and danger of mingling the remedies of one class of diseases, with others diametrically opposite, explained. The administration of *antiseptics* alone, in putrid diseases urged ; from thousands of hospital facts, that are ready to be produced, beyond the possibility of suspicion, or refutation. Sources of true and apt intelligence have been derived from the visible art of surgery, and anatomical facts. Nothing remains, but to apologize for this hasty production, lest any expressions should prove offensive. It is prejudices, not persons that are arraigned.—It is hoped, sincerely, that the subsequent *successful mode* of curing *putrid malignant diseases* may become universal, and GLADDEN all the face of the EARTH !

To the Treatise on putrid malignant Fevers, is added, some improvements in Gun-shot Wounds, and Thoughts on the Plague, which, it is hoped, will prove acceptable.

IN

*. The internal *livid spots* found by dissections, and the discolorations that appear in dead bodies, who die of putrid fevers, plague, &c. arise from the same causes as the *purple petechiæ*, which are seen in the skin outwardly.

IN THE PLAGUE,

Numerous authors are cited, and it must be insisted on, that except *Diembrocck Mindererus* and *De Mertens*, who lately wrote on the Plague at *Moscow*, where 100,000 died, and who cured many by the *acid* of *vitriol*, *bark*, &c. all are very erroneous in their doctrines. These physicians were in the very tragic scenes, and have given faithful accounts of the sudden depopulation of the countries where they practiced, and a more rational mode of treatment than all others ; but it must be observed, that, like *Russel* and most others, they did not spare the LANCET, and where the last physician did, he saved many.

It might be asked, What can be done in such a calamity ?

1. Remove the afflicted immediately from the infected place ; but many will sooner die than complain, lest they be forced from their families or affectionate friends, and, therefore, prompt remedies cannot be applied in the early stage of the disease, and thus thousands perish without assistance. Let all apartments be fumigated, by Dr. C. Smith's, or Morveau's operations, or by tobacco, &c. &c.

2. Let

2. Let open airy buildings be erected, something similar in their upper part to a brewhouse, in the loftiest places, where there can constantly flow a stream of pure air through all the lower apartments, and foul air ascend and be discharged through the upper apertures.

3. Iron bedsteads, such as we have at the St. Mary-le-bone Infirmary, will be proper, without curtains, and the sick should lie in bed as little as possible.

4. Let no person be BLED where putrefactive particles are supposed to be circulating in the blood, that is, infected with putrid fevers or the plague, where *livid gangrene spots, carbuncles, or buboes* may be rationally expected, and in consequence internal mortification, &c.

5. Let government, or parishes, have prepared, even in the street, wine, beer, or spirits and water, acidulated with vitriolic acid, to be given to all the poor, and all *rational* methods extracted from writers, be practiced in the public calamity.

6. Let all places be examined, and cleanliness insisted on, and let all the poor be visited, gratis, and supplied with bitter decoctions of snakeroot, bark, cascarilla, infusions of chamomile flowers, united to spirits and acid of vitriol. These are the
rational,

rational, and only rational modes of preventing the plague spreading, and curing all putrid affections, as the scarlet fever, &c. &c.

The celebrated professor of singularities, DR. RUSH, of Philadelphia, after a variety of projects to cure the malignant yellow putrid fever, in which there seems but few proofs, either of scientific principles, or consistency, but a versatile imagination let loose without any solid judgment; at last, BLEEDING repeatedly, to 100 or 150 ounces, even when purple or BLACK PETECHIÆ, or spots, were present, was adopted, and giving *calomel* and *jalap*, in large doses. This doctrine was practiced vehemently by ignorant enthusiasts, under that physician's direction, by unguarded inexperienced pupils, black methodistical parsons, an auctioneer, and others; for the inventor of these extravagancies found, that moderate and more learned physicians of experience, condemned such irrational conceits. He declared that girls or boys, of fourteen, might be taught the whole treatment in a few hours, and that the salvation of the citizens depended on the adoption of these sagacious novelties, or rather old destructive treatment revived.

After boasting in the papers of these valuable discoveries, and informing the public of the shops that vended the medicines; and, in conjunction with his sagacious noviciates, running through the city by day and night, inculcating these grand precepts

precepts until he was hoarse.* The dead list, or bills of mortality, to the disgrace of the new adventurers, increased from the daily number of 23, to the enormous number of 119; that was from September the 11th, when the practice commenced, the fatality daily increased, to October the 11th; so that notwithstanding the wonderful remedies of *bleeding* to exhaustion, and *purgings* with *calomel* and *jalap*, without mercy, death, cruel death, no respecter of doctors, and their wild chimeras, increased the deaths to five times the daily numbers, in the period of one month. SANGRADO like, these evident prejudices were obliged, apparently, to be defended, and actions, at law, were threatened and brought, challenges, &c. were sent, and beating was inflicted on those, who dared to utter their rational doubts on the efficacy of these wonderful prescriptions; notwithstanding they had been censured by the College of Physicians, at Philadelphia. Near ten thousand inhabitants died in a short time; but whenever any one escaped by a constitution sufficiently strong to resist even these errors, such instances were trumpeted forth, and considered as a proof, contrary to all true logical principles, of the utility of the otherwise deleterious practice. Dr. Cuchillo was beat by *Gil Blas*, as a proof of the truth of Sangrado's doctrines.

Several

* This was expressed in a letter I saw.

Several professional men attempted to oppose this mad career, but they attempted it in vain; for a smooth specious deportment, and an appearance of earnest solicitude for the welfare of society, under these calamitous dreadful circumstances, bore down, like a torrent, every caution, or warning that the feeble mild voice of reason, experience, and truth could utter. The field of slaughter, therefore, was left to the furious *venesectionists*, *jalapists*, and *calomelists*, with little or no opposition, and the havoc, of course, was dreadful; but when the patients died, a prompt subterfuge was ready; namely, that they were not bled nor purged enough, or that the infallible remedies were applied too late to be serviceable!

The faculty, and most reasoning philosophers, will not be surprised when they are informed; that besides these fancies :*

1. That the patients were wrapped up in *blankets* first dipped in *vinegar*.

2. That the expiring had buckets of *cold water* thrown over them.

3. That *mercurial ointment* was rubbed on the right side, ridiculous idea, to excite an action on the vessels of the liver.

4. That the reason given for those enormous bleedings was, that great hæmorrhages happened in
these

* See the account in a work called the RUSH LIGHT.

these fevers, &c. This circumstance, the merest *Tyro* in the profession knows, that in putrid diseases, it arises from the *broken down* and *putrefactive* crisis of the blood, almost reduced to a dissolved state, and issuing from the mouth, gums, nose, and even through the intestines, &c. and even passes through the exhalents on the surface of the skin, with a horrid putrid stench.

5. That the same Doctor bled freely in *dropsy*, and in the *ague*.

6. That he conceived, the best mode of curing a consumption, was to sail on the sea, work before the mast, live on salt beef and biscuit, or coarse sea food, be exposed to *wet* and *cold*; or work hard, and follow the plough, &c. Such is the cure for ulcerated lungs, pulmonic hæmorrhages, &c.

7. Another extravagant idea of this hypothetist, is, that the black colour of *negroes* is owing to the *leprosy*, and that when they may be purged of that disorder, they will become as WHITE as SNOW.

After such specimens of versatility of heated imagination and exuberance of fancy, the discerning, learned, and intelligent, will be at no loss, for any extraordinary conceptions, or contradictions, that may pervade the soul of this extraordinary man, this chimerical professor of singularities!

It

* Dr. Rush's thermometer of temperance, &c. published by my amiable friend Dr. Lettson, merits high approbation.

It may be observed that the great GENERAL WASHINGTON, according to the opinion of the learned Dr. Brickell, fell a victim to this vehement bleeding practice; for at the age of 69, he was bled *three times*, freely, in the course of a *very few hours*, and *immediately expired*, without a groan!

Perhaps, it might be imagined that more has been said on the Philadelphian practice of Dr. RUSH, than it merited; but when it be considered, or known, that many young inexperienced medical practitioners, from a fervid fancy, have followed, and are following the same fatal treatment in different parts of the world, it cannot be too publicly, or spiritedly reprobated, that innocent, unsuspecting patients may no longer be sacrificed to practices, or opinions, that have been condemned by all experienced and learned men in the profession,* and particularly by all the eminent practitioners in LONDON, for half a century.

This

* The same Doctor, in an Essay on Education, says, that the *learned languages* are useless to all *true learning*. O TEMPORA! O MORES; &c. It is easy, very easy to gain *proselytes* to extravagant novel opinions, and to all things irrational and incomprehensible; but to fix human minds to a strict regard to truth and demonstration, difficult. Mankind admire the marvellous, and assent to propositions that are incomprehensible, while they neglect what is actually attainable. The bottle conjuror, the oyster walking in his sleep, the Cock-Lane Ghost cum multis allis, are incontrovertable proofs of human credulity, and the arts necessary *ad captandum vulgus*.

This article may be closed with a part of the defence of *Mr. Cobbett*, who was fined 5000 dollars, for exposing this practice. It seems the jury afterwards were concerned for their verdict.*

“ Now, Gentlemen, what think you of the resemblance? Dr. Sangrado is a man of *singular opinions*; so is Dr. Rush. Dr. Sangrado draws blood, *porringer after porringer*; Dr. Rush, *pint after pint*. Dr. Sangrado employs copious bleedings to *supply the want of perspiration*; so does Dr. Rush. They both recommend *bleeding in the dropsy*. Dr. Sangrado says that it is a gross error to think *that blood is necessary to the preservation of life*; Dr. Rush calls it the triumph of *reason*, to prescribe *bleeding almost to death*. Dr. Sangrado sends a *footboy*, a *lacquey*, to bleed and drench the citizens of Valadolid; Dr. Rush qualifies *negroes* and *old women* to bleed and purge those of Philadelphia. Dr. Sangrado has written a book; so has Dr. Rush; and they both resolve to *stick to their principles and practice to the last extremity*. Dr. Sangrado is called by his contemporaries, the *Hippocrates of Spain*; Dr. Rush's contemporaries call him the *Hippocrates of Pennsylvania*.—The only shade of difference is in their practice; the American employs doses of mercury and jalap, while the Spaniard contents himself with draughts of warm water; and, I believe, you will confess, that the latter is, at least, as innocent as the former.”

* He deserved a crown of gold for his spirited opposition to the wild Republican, who ought to have been expelled the city for his practice, if the disorders were actually putrid.

Two sentiments naturally arise in the human mind, on reflecting of the consequences, fatal consequences of such dreadfully destructive doctrines; sorrow and compassion for the numerous thousands, who suffered, mixed with indignation against the cause of the spreading evils. The motives of the Doctor may be considered well intentioned, and it is but just and charitable to think so; yet many wrong-headed adventurers are daily committing injuries to all mankind, under the mask of pretended services. The same kind of excuse, however, might be advanced for numerous miseries arising to society, from enthusiastic visionary reformers, mad politicians, or bigots; for instance, *Marat, Robespierre, Lord George Gordon*, or any other dangerous enemies to society.

The conceits were out of reason, and easily discovered by penetrating sensible minds; but being published and disseminated amongst weak vulgar unlearned persons of violent passions, obstinate, self-sufficiency and weak judgments, the mischiefs to society, for years, became incalculable, irreparable! When *common sense*, that is common *vulgar*, low selfish notions, be compared to a refined sedate understanding and liberality, the result of a classical education, study, learning, active commerce with the world, reflection, and the experience of all ages, from extensive reading, incorporated

into the human mind: those vulgar notions are as a few particles of loose incoherent sand, compared to the solidity and extensive expanse of the whole terrestrial globe. So that it must be acknowledged by those who despise the *learned languages*, or cultivated science with the Philadelphian Physician, that there is a greater chance of acquiring real knowledge, as at *Oxford, Cambridge*, or any learned University, by a *ten years study*, before students are admitted to a *Doctor's degree*, than where such useful discipline is not enforced by university statutes.

The result of this learned education is evident among the ROYAL COLLEGE OF PHYSICIANS, in LONDON, who are obliged to understand the *learned dead languages*, and speak Latin. It may be asserted, without the least violation of truth, that there are always in this learned body corporate, men of the first distinction for a knowledge, not only of physic, but of all the branches of science, and polite literature. It may be truly said, likewise, with confidence, that all the visionary, hypothetical and dangerous conceits, that, at times, have issued, overspread, and disgraced the art of physic, have been the offspring of actual ignorance, or insufficiency, in anatomy, physiology, pathology, and experienced therapeutics. It is the half learned and confident, not the real deep and scientific, who commit themselves

selves in assuming a knowledge, which they have not had opportunities of attaining. Appearances are often received, by the undiscerning, for realities, and thus delusions are approved.

The unsuspecting, credulous, and uninformed world, or thoughtless multitude, give their wild suffrages often without reason; and they meet their ungrateful reward in the destruction of themselves, their families, and the rest of the human species.—And here it is necessary to pause.—Had I not thus delivered these free sentiments, whatever may be the result, on this important occasion, I should ill deserve the public confidence, so long enjoyed; nor could I have slept in peace, without adding this small tribute of gratitude to the public, and to the service of all human society!*

In the Medical Lectures I have had the honour of giving to a numerous audience, for the purpose of excluding false systems, idle vain speculations, and to inculcate sound practice, there is an endeavour to expose medical sophists, altercators, and the dangerous effects arising from many inexperienced daring

* I have shewn in the Latin and English edition of *Schola Medicinæ*, &c. what are the studies requisite to become a complete, learned, skilful, humane and moral physician.

daring violaters of all the facts established by long experience. It is there proved, that most of the superficial novelties of the present moment, originate in total inexperience, or a slight knowledge of the art, or in not knowing what has, for ages, been repeatedly tried without success, and for which reason, have been abandoned by all rational and experienced physicians, and it was hoped, never to be revived again to insult science, or injure society. The contrary is the fact, and those who have had least experience, are the first to step forward and oppose their fanciful conjectures, their dissonant experiments to real experience. It is seriously recommended to such characters to study their profession, deeply, to suspect their sudden formed conjectures, to listen to those who have spent their lives in science, study and practice. We shall then have fewer instances of the destruction of the human species, and more proofs of the salvation of all society. Those who are really learned, and experienced in the art, are diffident in cases of difficulty, rational, cautious and modest; those who are superficial and inexperienced, are, frequently, assuming, confident, irrational, incautious and insolent. These truths are expressed with the utmost reluctance; but the times and circumstances, admit neither of palliation, nor dissimulation.

A

Treatise

ON

Putrid Malignant Fevers, &c.

THREE express treatises have already appeared, exposing the destructive tendency of mal-practices, in the treatment of *putrid malignant diseases*, or *fevers*. Every useful information on these subjects, was unreservedly communicated, and it might naturally have been expected, that the uninformed would have had recourse to those facts, experience and observations, that had actually originated in opportunities that few ever possessed, in the West India Islands, French, English, Spanish, America, and in different parts of Europe, of

B

not

not only inspecting putrefactive affections, in all their forms; but in improving their treatment, for a period of between forty and fifty years.

In the late and present calamitous state of facts, relative to these devastating diseases; when the most authentic testimonies swell with the *thousands* and *tens of thousands*, who have perished in the *West Indies, America, Spain, Gibraltar*, and other places, from putrid, infectious, malignant fevers; it might be imagined that cures were impossible, or that inattention, or ignorance pervaded the whole medical science; and that there were no remedies adequate to counteracting and conquering these dreadfully ravaging complaints. The contrary is the truth, and there are as fair prospects, and as great certainty of curing these dreadful disorders, as many others incident to the human body, if practitioners would unite in eradicating false systems, speculations, irrational projects, and fatal prejudices; this humanity may oftener wish than accomplish.

It is losing time to little purpose to enter into controversy; it is the moment to be on the alert; for this horridly fatal disease may visit
this

this country, and if serious attention be paid to the following doctrines, we shall meet the hydra-headed devouring monster, without fear or trembling.

WHAT ARE TO BE CONSIDERED
PUTRID FEVERS, &c.

THE definition of putrid malignant fever, is plainly this:—Every fever that arises from putrefactive particles floating in the air, or received into the body, contaminating the blood; and producing, what are considered *putrid symptoms*, are, more or less, putrid diseases. The scarlet putrid fever, and malignant sore throat; the most vehement *West Indian, African, or American, putrid, jail, or yellow fever*; fever arising from putrid infection in dissection; and the *pestis, or plague*, may be all ranked under one class, though they have all different degrees of power, in more slowly, or more rapidly destroying the human species; if timely, judicious, and consistent remedies be not skillfully administered; but if active antiputrescent opponents be early prescribed, these putrid malignant fevers, even of the most dangerous class, are frequently disarmed of all their alarm-

ing terrors, and cures are often effected. This is not the assertion of inexperience; but originating in thousands of cures in these calamitous disorders; the methods by which they were accomplished, have been already published, and they shall now be repeated with considerable improvements. Those who are inexperienced, may avail themselves of the doctrines; those who have erred, may correct their errors; and, those who have yet their profession to learn, may imbibe just notions of putrid diseases, without the transatlantic travels, studies, and other labours of the author.

THE MANIFEST AND KNOWN CAUSES OF PUTRID MALIGNANT FEVERS, &c.

THE known causes of the putrid malignant yellow fever of the West Indies, America, Africa, or other parts of the world, are contaminating putrid vapours, or exhalations from animal and vegetable substances in a certain state of high putrefaction. Pure air produces salubrity, putrid foul air putridity.*

THE

* The black hole at *Calcutta*, produced the most rapid putridity known, perhaps, in the memory of man.—On these

THE EFFECTS OF THOSE VISIBLE
CAUSES IN THE HUMAN CONSTI-
TUTION.

AFTER the absorption of putrid particles into the lungs, by respiration, or breathing; they being received, presently are carried to the *thoracic duct*, by the *absorbent lymphatics*, from thence, by the communication with the veins, to the blood in the *vena cava*, from thence, to the *right auricle* of the *heart*, *ventricle*, *pulmonary artery*, and *veins*, left *auricle* and *ventricle* to the *aorta*, which sending the blood to all parts of the human body, for the various purposes of life, as nutrition, secretions, external and internal exhalation, &c. &c.—and thus, the whole body soon becomes contaminated. The *putrefactive particles* increase; and, like other infections, produce, in a given time, their ravaging effects in the animal, vital, and natural functions. The medical mind, fraught with physiological science, can easily pursue the

B 3

particles,

subjects, much may be seen in the treatises I have already published, which are all in the fourth volume of the rational and improved practice of physic, rejecting false systems, and founded on anatomical, physiological and practical truths, dissections after death, &c. &c.

particles, with the doctrines of putrefaction; easily account for their effects, and as easily perceive the *fatal* consequences, if not promptly counteracted. These principles are not founded in visionary conceits, as every truly learned physician must perceive; but in solid facts, and demonstrations, which, when well comprehended, must receive universal assent from the whole profession.

The putrid particles increasing in the blood in every repeated circulation, according to their vehemence, heat of climate, exaltation of putridity, &c. produce the commencing symptoms of putrid malignant fever:

1. The putrid particles first irritate the nervous system.

2. This acts on the muscular moving fibres of the heart and arteries, exciting quicker pulsations, and force on the blood, with greater velocity.

3. The arteries act on the contaminated blood, producing a rapider circulation in every part, and thus all the functions, animal, vital and natural, being, more or less, irritated by
morbid

morbid putrefactive causes, all, all partake, more or less, of the effects.*

Thus is delivered, the physiological and pathological causes of all those visible effects, that follow putrid infection, or contagion.—These have been proved, sentence by sentence, in the public medical lectures I have had the honour to deliver, to a numerous audience of students, and medical practitioners. To enter into a detail, at present, would answer no important purpose, therefore the symptoms, or signs of putrid malignant affections shall be delineated.

SYMPTOMS,

* Nothing can be more disagreeable to the olfactory nerves, than the putrefactive smell of fish, or meat, where the tradesmen are not cleanly. Conceive large masses of putrid animal matter united to vegetables, in a state of high putridity, as in a certain street at Gibralter; where Jews, Turks, and Christians are mingled in filth, in a dry hot rarefying season, after rain; and putridity will be comprehended in all its horrid poisonous forms. The same happens amongst the Turks and other nations.

SYMPTOMS, OR SIGNS OF PUTRID INFECTIOUS MALIGNANT FEVERS.

EFFECTS are adequate to their causes. If the putrefactive poisonous particles, producing the malignant fever, be very active, as in hot climates, the effects are sensibly experienced in a few hours; if the particles be less active, or if they be restrained by a cooler region, they are not so rapid in their effects, nor so dangerous in their consequences.*

SYMPTOMS

* The following general symptoms of existing putrefactive particles circulating in the blood, &c. are not confined to one particular fever; but comprehend all those morbid effects, that arise from putrid-tending contagion, and are, more or less, applicable to the putrid malignant sore throat, except the visible proof of that disease, beginning with white specks about the *fauces*, and *tonsils*; the scarlet fever, and putrid sore throat; the putrid-tending erysipelas; the putrid petechial fever, with livid, or purple spots; the putrid nervous fever of America; the putrid bilious, or yellow fever of the East and West Indies, America, Africa, &c. which happen the latter end of August, September, and October, in very hot and rainy seasons; the secondary *putrid fever*; in the bad *confluent* small pox, *pestis* or plague; in the dreadful putrid fever, that arises in dissecting putrid bodies, from a scratch on the finger, or a slight cut from the dissecting knife, puncture, &c. and in short, all disorders, without exception, that take their origin from putrid miasmata. They all originate from similar causes; and, if medicine be consistent and rational, they should be all considered in one point of view, and attacked by similar and efficacious antiputrescent modes of cure; or no success need be expected.

SYMPTOMS IN THE ANIMAL FUNCTIONS, OR BRAIN AND NERVOUS SYSTEM; WHERE ALL SENSATIONS, AND FIRST CAUSES OF IRRITABILITY ORIGINATE.

THE absorbed putrid poisonous particles, having contaminated the blood, and altered its constituent original and healthful principles, act, and are acted on by the soul's and nervous powers, in the brain and nerves; and the first sensations are, DEBILITY and LASSITUDE, with MENTAL DEPRESSION. *Cold shiverings*, and *horror*, arise from the nervous influence being diminished, or abolished, *pro tempore*, in the muscular vibrating coats of the exhalent arteries, immediately under the *cuticular*, or outermost *skin*, which for a time becomes *dry*.

As *putrid particles* increase in their stimulating powers, on the muscular moving and vibrating tunics of arteries, increased red vascularity in the membranes of the brain is the consequence; as in the *dura* and *pia mater*, particularly in the direction of the *falciforme process*. This, hundreds of dissections have fully proved: or effusions of extravasated blood, pour from ruptured vessels. The former

mer generally cause *pain* in the *head*, *delirium*, &c. the latter, *dulness*, *comatose*, or *sleepy* symptoms, *gangrene*, or *mortification* of a part of the *brain*, and *DEATH*.

SYMPTOMS IN THE VITAL FUNCTIONS, DEDICATED TO THE CIRCULATION OF THE BLOOD, AND RESPIRATION, OR BREATHING.

THE contaminating putrid particles already received in the blood, stimulate the nervous system of the heart and arteries, to increased action, and instead of sixty or seventy vibrations, above one hundred and twenty, or even one hundred and fifty strike in a minute; hence *quick pulse*, and increased *intense heat*.*

As the putrid fever proceeds more violent, the extreme branches of numerous exhalent arteries effuse part of the morbid, putrid-tending fluid, under the cuticle, in purple, or dark spots, called *petechiæ*, or *purple spots*. A dangerous symptom, certainly, in infectious fevers.

Bile

* See *Schola Medicinæ Universalis Nova*, page 314, Latin edit. and page 168, of the English edit.

Bile is diffused, however, in the yellow fever. Or proceeding no further than the cellular structure, immediately under the cutis, putrid, or other dispositions of morbid fluids are thrown into the cells of the cellular structure, producing critical abscesses, or gatherings, very fetid, putrid, and even gangrene, or mortification. Such symptoms and effects of contagion, belong more particularly to the *pestis*, or plague.

The arteries, likewise, destined to carry nutritive particles of blood, to be assimilated, attracted, and retained, for the purposes of daily nourishment; the secretions, whether biliary, pancreatic, salival, mucal, urinary, or others, are all perverted, and their healthful intentions frustrated: from these sources are felt *extreme debility*, and unusual perturbations in the animal, vital, and natural functions. Every healthful action, and fluid, are changed into direful disease, producing inexpressible alarming sensations, in mind and body.

RESPIRATION, or breathing depending on pure air, for health, in the absorption of the vital principle, and free and uninterrupted ac-
tion

tion of the lungs, diaphragm, and other muscles and parts subservient to this vital function, experiences a diminution of all its vigorous, muscular, and other powers; hence disagreeable sensations in breathing, *oppressions* of the *chest*, *anxiety*, and *singultus*, or *hiccuping*, are common attendants in progression of fevers; but particularly the highly putrid.

As the power of the contaminating particles, and the putrid diseases increase; the crisis of the blood becomes in so dissolved and putrid-tending state; that the irritated mouths of exhalent arteries pour forth the highly putrid, and dissolved blackish particles from the *mouth*, *nose*, *surface* of the *intestines* in feces, urinary passages, and even through the *pores* of the skin itself, in the West Indies, Africa, &c.

Hence, it has been pronounced by authors of great respectability, who were long resident in the West Indies, that towards the last stages of the yellow fever, putrid blood dissolved, issued through the pores of the skin; it was serum tinged with putrid red particles.

SYMPTOMS IN THE NATURAL FUNCTIONS, DESTINED TO MASTICATION, DEGLUTITION, DIGESTION, CHYMIFICATION, SANGUIFICATION, NUTRITION, SECRETIONS AND EXCRETIONS, &c. &c.

MASTICATION is generally unnecessary; as an APPETITE for food is destroyed; therefore, LOSS of APPETITE is a symptom. The salivary glands cease to secrete saliva; the mucal glands of the mouth and fauces, mucus; and the exhalent arteries no longer pour forth their moistening vapours, or but in small portions. Hence *dry, brown, black tongue, thirst,* and putrid viscid mucal particles, adhering to the tongue, mouth, gums, teeth and lips, and a very fetid *halitus*, or breathing offends the olfactory nerves of the attendants.—All these circumstances, augment the morbid, putrefactive evils. Putrefactive air is received, and emitted, to and from the lungs, especially if there be a sloughing ulcer about the fauces, as in *angina putrida*; and all the symptoms, become hourly more seriously alarming, and evident.—These happen, more or less, according to *heat of climate*, force, and other circumstances of the putrid causes, particularly men-

tioned in my treatises, on putrid diseases. Digestion and chymification of food are no longer duly performed; nor the seeds of good chyle produced. The *liver*, however, and *stomach*, perform a very dreadful part in violent putrid diseases. The liver contaminated with the morbid and putrid-tending particles, carried thither by the *vena portarum*, for secreting bile; that secretion becomes vitiated, corrosive, irritating, and being conveyed into the duodenum by the *ductus communis choledochus*, irritates violently, the *first* intestine, which inverting the peristaltic motion of that intestine, pylorus, stomach and œsophagus; the bile deeply *yellow, brown, or black* is thrown constantly through the pharynx, and mouth; causing what is justly called, *violent bilious, or black vomitings*.

If a part of this vitiated, acrimonious, putrid bile, should carry its effects downwards; then, the *five* intestines, below the *duodenum*, are thrown into great perturbation, and enormous FETID, BILIOUS, or dysenteric purgings are the consequences; offensive, and putrid in the extreme, and sinking the unfortunate patient in a manner, almost inexpressible. Chylification, sanguification, nutrition, on which, health and
strength

strength depend, are destroyed; and all the various secretions, dependant on salubrious blood, vitiated, suspended, or abolished, during the RAGE of the violent, malignant PUTRID FEVER.

The kidneys, likewise, secrete and excrete through the ureters, and bladder, a YELLOW BLOODY, DARK COLOURED, OR BLACK PUTRID URINE, accompanied with a stench, most horrible!

Such, more or less, are the effects of putrid particles, transmitted into the blood, and circulating with degenerating and putrifying that fluid. Can any thing be more obvious, than the *cause* and *effect*, the *effect* and *cause*, of all these, and many other symptoms in the animal, vital, and natural functions, during the predominating reign of direful, putrid, malignant, and contagious, or epidemic fevers?

As an arrangement of symptoms in putrid affections, may be useful to junior practitioners, the following may be resorted to.*

* PUTRID, ULCERATED, AND MALIGNANT SORE THROAT, AND SCARLET FEVER.

- I. Soreness and impeded swallowing.
- II. The fauces are of a darker red than usual.
- III. Whitish, or yellowish spots appear on the tonsil, glands, &c. with tumefaction at times.
- IV. The countenance is paler, and more tristful than usual, and the eyes are more languid.
- V. Alternate heat and cold.
- VI. The mind dejected, bodily strength diminished, faintness, and dryish skin; but, if accompanied with the scarlet fever, red.
- VII. Heaviness, lassitude, vertigo, pain in the head.
- VIII. The tongue, at first white with little thirst, often brown and dry, and sometimes with black incrustations.
- IX. The urine pale coloured, &c.

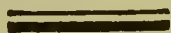
AS THE DISEASE ADVANCES:

X. A florid red appearance in the face, neck, breast, arms, hands and legs.

XI. A

XI. A general tendency to putrescence, putrid ulcerations on the tonsils, gangrenous sloughs, fetid breath, hæmorrhages of dissolved blood, diarrhœa, dysentery, subsultus tendinum, death.

XII. These last symptoms, by our improved treatment, seldom, or never appear; the disorder in general, being early cured with certainty, by *antiseptics*. See *Treatise on Ulcerated Throats, &c.*



PUTRID AND YELLOW FEVER OF THE EAST
AND WEST INDIES, AMERICA, IN THE SOUTH-
ERN PARTS, AFRICA, SPAIN, ITALY, &c.

I. Lassitude, dejected spirits, with or without, previous cold shiverings.

II. Head ach, nausea, *incessant vomitings* of yellow, greenish, brown or blackish, vitiated bile.

III. Uneasiness in the whole body, thirst, dry parched tongue, of a browish, or blackish appearance. Purple spots, or partial gangrenes in petechial fevers.

IV. Cadaverous stench, putrid evacuations of feces, urine, &c.

V. Yellow appearance in the white of the eyes; the same about the third, or fifth day, diffused all over the body, and the darker the colour, the greater the danger.

VI. Fear, timidity, and dreadful apprehensions, and anxiety of mind, tremors, deafness, &c.

VII. As the disease increases, putrid blood united with mucus, appear about the gums, teeth, nostrils, &c. and putrid hæmorrhages issue with horrible stench.

VIII. Delirium sometimes happens, sometimes not. Stupor, catching at straws, eyes turned up.

IX. All the violent symptoms seem to subside; the patient is often sensible and serene, brown, putrid, and sanious perspirations issue from the external pores, faintness, and imperceptibility of pulse follow; and with little, or no sensation of pain, the patient expires without a groan!

These are extracted from my journals, from viewing the scenes above 40 years ago, in the French, Spanish and English West India Islands.

The *Senegal putrid malignant fever*, as described by my intimate, and early friend, Mr. now Dr. Vage, an Army Surgeon, was more vehement in all symptoms. *Bleeding killed*, coolers augmented all the direful symptoms; *bark and acids*, with pure air alone succeeded. The doctrines of this very sensible practitioner, perfectly agree, with all unprejudiced practitioners of experience. This gentleman, was in the captured *French West India Islands*, in 1761 and 1762, &c. he cured by *antiseptic methods* many
putrid

putrid malignant fevers, and acquired an high, and deserved reputation for his skill, in these otherwise fatal diseases.

IN THE PESTIS OR PLAGUE.

The symptoms are very vehement, but similar to all the other putrid malignant fevers, with carbuncles, or dreadful abscesses of the putrid kind, which, if they break, or are opened, emit matter of a most horrid stench, &c. &c. See authors.

DIAGNOSTICS OF PUTRID, INFECTIOUS, MALIGNANT FEVERS, OR HOW THEY ARE TO BE DISTINGUISHED ACCURATELY, FROM ALL OTHER FEVERS, OR DISEASES.

1. ALL disorders incident to the human body, that cannot be communicated to others by respiration, or breathing in the rooms of the afflicted, are not *contagious, putrid, nor infectious* fevers.

2. All fevers, or other disorders, that *do not* arise from putrid contagious particles in the
atmospheric

atmospheric air, or the air surrounding us, where infection is not present, *cannot* be putrid.

3. Inflammatory fevers, or inflammations are *not contagious*, or infectious. Persons affected with inflammations of the pleura, lungs, diaphragm, stomach, intestines, &c. do not infect others with the same diseases; therefore, inflammatory diseases, are not infectious, as are the putrid. The first doctrine, I endeavour to inculcate, in my public lectures, as the characteristic of inflammations, or inflammatory fevers, is, that they are *not contagious*, nor arise from putrefactive air: but generally from cold, the body being warm.

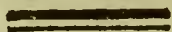
4. The putrid malignant fevers differ from the intermittent, or ague, which last are *not contagious*, and generally arise from cold and moisture, in fenny countries, &c. or long continued rain, and a cold easterly wind, &c.

5. The *putrid fever* differs from the *nervous fever*, for the latter generally arises from long continued affections of the mind, moist atmosphere, &c. united to some occasional cause, and though they may *become putrid fevers*; yet their origin is not in putrefactive particles,

floating in the air; and unless they change their original type, and become putrid, are not contagious. Bark, and vitriolic acids, cure these, fevers under such circumstances.

6. *Hectic fevers*, from morbid viscera, or previous diseases, wasting the body are *not contagious*, nor infect others with the same fever, as do the *putrid malignant*. Therefore, the distinguishing characteristic of *putrid sore throat* and *scarlet fever*, *putrid nervous fever* of *America*, *putrid fever* of *Africa*, *putrid petechial* and *jail fever* of *Europe*, the *putrid bilious malignant infectious fever* of the *East* and *West Indies*, *America*, and all hot climates, the *plague* itself, is, that they all originate from *infectious putrid particles*, first *contaminating the surrounding air*, in various degrees, and in various modes, according to the extreme fiery heat, or temperature of the climate, and the magnitude and force, or putrefactive *powers* of the original causes. The disease being once present, may continue, by the infectious particles of the afflicted, communicated to others in the soundest health; and therefore, the disorder, though, perhaps, first epidemic, from *putrid air*, afterwards becomes contagious, or infectious, and makes
such

such rapid strides, as to have frequently rendered cities desolate; so great has been the depopulation of countries from putrid, malignant, infectious fevers. Of such facts, ancient and modern history is replete.



THE PROGNOSTICS, OR A FORESIGHT
OF THE GENERAL EVENTS AND
CONSEQUENCES OF PUTRID MA-
LIGNANT FEVERS.

NOTHING can distinguish a physician more, than a skilful and true foresight of future events in diseases.

1. If these putrid contagious diseases be left to *nature*, according to the doctrines of the *sectatores naturæ*, DEATH is generally the consequence.

2. If the wild effusions of a wanton fancy should induce inexperienced practitioners, or others, coming from Northern countries, to suppose putrid *infectious* diseases to be *inflammatory* in their commencement, and should *bleed, purge, cool* with *nitre*, give *jalap*,
calomel,

calomel, antimony, saline, or neutral salt remedies, they will destroy three-fourths of the patients they are called to, and vainly think they are right, because there is *heat, quick pulse, dry tongue, &c.* Thousands, nay millions have fallen victims to these errors.

3. If *antimonials, calomel, opium, and spiritus Minderarii, &c.* be administered, unless for the first few hours, in slight cases, to remove a dry skin, the cure of a putrid disease becomes very uncertain, and dubious. *Saline remedies, bleeding, calomel, and antimonials*, are more appropriate to true inflammations, and are excellent in their cure.

4. If bleeding repeatedly, purging with jalap and calomel, and saline cooling remedies be given, under the plausible, and in these diseases, *false pretext* of checking the rapidity of the blood's motion, or diminishing arterial action, checking the pulse, and extinguishing the heat, thirst, &c. and if the practitioners be weak enough to expect excellent effects from merely sponging the body with vinegar and water, though vinegar be not objectionable, rubbing in mercury, and such indeterminate
incongruous

incongruous practices, which have little analogy to known antiputrescents, death, in general must ensue; as could be indisputably proved, in thousands of instances, where such methods have been adopted in the *West Indies*, *America*, &c. of which, I have the most incontrovertable documents. *Error* is often thought, by the credulous, the height of *excellence*, and persevered in through *pride*; but by comparison, facts are determined, who loses, or who cures most, settles the controversy.*

5. If practitioners wait, as many have done, for an expected remission two or three days, and in those early periods have administered the trifling practices of the old *Böerhaavian School*, or the mixed incongruous practices of the celebrated *Professor Cullen*, of *Edinburgh*, and his followers; and when a diminution of violent symptoms appear, give the *bark*, &c. they will be disappointed of curing the patient. This apparent remission is often the commencement of *gangrene*, either in the brain, lungs, stomach, intestines, or other viscera; coldness of extremities, and death generally follow.

6. If

* The liver disease of the East, is not the yellow fever of the West.

6. If the *bark* should, credulously, or imprudently be depended on, *alone*, in these diseases; the cures are very doubtful, although administered in the early stages. Perhaps, there is not so great a quantity of *good bark*, or *cortex peruvianus*, as formerly; at least, it has not the efficacy, even in intermittents, as represented by former authors. Monopoly and sophistication reign triumphant without control, often to the detriment of human beings: but *commerce*, *commerce*, must be *protected*, even in all the necessities of life, however society may suffer.

7. If *bleeding*, *cooling saline* remedies, be applied, even in the *scarlet fever*, with *putrid sore throat*, three-fourths of the patients perish by such mal-practices, which my deceased worthy friend, Dr. Fothergill, first proved; but by commencing the cure, with an antiseptic laxative, without regard to *heat*, *quick pulse*, *dry tongue*, &c. &c. if the *acid* of vitriol diluted, and extract of *cinchona*, &c. be liberally prescribed, it is impossible to lose a patient, except under particular circumstances, though formerly few, very few, recovered. Who *destroys*, and who *saves life*, might be here applied in a practical view.

8. If such mischief evidently and indisputably arises from *bleeding* and *cooling* in the foregoing diseases, which *Drs. Fothergill, Wall, Johnston*, and others, have fully proved, how much more dangerous must a similar erroneous practice be, in the more violent *putrid* affections of *hot* climates, which European physicians, especially of the Northern countries, have scarcely any conception of? Facts speak for themselves; as a proof of the ill success of the practice lately adopted: thousands, and thousands, have perished in the *West India Islands, Philadelphia, South Carolina, New York*, and other places; and will perish, as long as visionary projects, false doctrines, the mere experiments of inexperience, and the application of European *coolers* to transatlantic *putridity*, continue to counteract those wise and successful modes of treatment, that have been established by repeated long *experience*; though seemingly *unknown* to the projectors, and promulgators of the destructive novelties of the present day. The *false* doctrines of the *schools* are the cause.

9. The *events* of *putrid diseases* are to be determined, when *mal-practices* be excepted, by the excess of *heat*, milder temperature of

the climate, season of the year, by the strength or debility of patients ; situation of the place where the infection reigns, and the probability of a prompt removal of the infected, from the place where the infection was caught, to more salubrious air.

10. Every assistance that can restrain the dangerous *destructive putrid fever*, must be directed with *energy*, consistent, not by mixed remedies ; and if judicious practice be adopted, numerous instances of *cures*, in the most dangerous *putrid malignant fevers*, will be the reward of such medical skill and judgment.

11. So that it may be solemnly and truly affirmed, that if putrid malignant fevers be treated injudiciously, by *evacuants*, *bleeding*, &c. or left to *nature*, they will prove *mortal*. If, on the contrary, they be speedily, consistently, and skilfully attacked with proper anti-putrescent remedies, often repeated according to existing circumstances, and with a stream of pure air, so far from proving dreadfully *fatal*, many thousands may be *cured*, and perfectly recover.

12. FAVOURABLE SYMPTOMS are, the early cessation of the bilious, or putrid vomitings, succeeded by a mild perspiration. The evacuation of the morbid matter downwards. Hope succeeding to anxiety, depression, and fear. The heat and quickened pulse diminishing; the dry blackish tongue becoming moist, from the salival glands acting; respiration performed, with less heat and uneasiness; the tristful countenance assuming its former natural appearance. On the contrary, all the symptoms augmenting without restraint, lead

WHAT DISSECTIONS SHEW, &c.

I HAVE had resolution, whilst in His Majesty's Service, to open putrid bodies of men, who died in 1762, at Portroyal hospital, Jamaica, to oblige that most amiable and skilful physician, *Dr. Jackson*, from whom I first received excellent instruction, in the treatment of putrid fevers, &c. before I went to the Havanna, where the putrid yellow fever made sad havoc; but this I sincerely believe, was more owing to *mal-practices*, than the disease itself, horrid as it is in devastation, and depopulation. They commenced by *bleeding*, gave *vomits*, afterwards opium, spiritus,

spiritus, Minderarii, camphor, compound powder of contrayerva, ol menthæ; and when the symptoms subsided by an *incipient gangrene*, then they administered the bark and acids; but, commonly too late to be beneficial, and few escaped in consequence.

When experience conceived that no practice could be worse, than where above 80 out of 100 died; both myself, and some others commenced, after evacuating the intestines, by throwing in the bark and acids immediately, and with *pure air*, 7 out of 10 recovered. From this, and succeeding similar circumstances, I was determined never to give any *saline remedies*, nor bleed in *putrid infectious fevers*. We never lose out of 100 in the St. Mary-le-bone Infirmary, above 5 or 6, and often in different years not so many; but our infirmary is of a peculiar structure to exclude *putrid particles*.*

APPEARANCES AFTER DEATH.

IN various subjects in hot climates, at Paris, Italy, and other parts of Europe, London, &c. &c. from dissections made by myself and others: indeed, for my own part, I have seized all opportunities of opening dead subjects for above 40 years, and am convinced of its great utility. On these facts, united to

D 3

long

* See the description in *Schola Medicinæ*.

long practical experience, are my lectures of the *new school* of medicine founded.

It is usual to *bury* the dead, as *soon* as possible after death, to prevent infection spreading ; but on opening subjects, at no small hazard of my life, the following were the appearances, after the yellow, and other putrid fevers.

IN THE HEAD AND BRAIN.

INCREASED red vascularity, distention of vessels, and livid spots in the dura, and pia mater ; fluid between the arachnoid membrane, and pia mater ; the brain itself, in parts mortified, or gangrenous ; abscess and purulent pus ; extravasated putrid blood, and a sanies, or serum in the ventricles of the brain.

IN THE THROAT, FAUCES, &c.

THE fauces, after the putrid sore throat, ill-treated, in a state of mortification ; the lungs, in parts putrid, and maculated with livid spots ; purulent pus in the bronchia. These appearances, likewise, have been found after death, from the *bite* of a *mad dog*, which I have shewn is a *putrid fever*.

IN THE THORAX, OR CHEST.

LUNGS putrid heart, and pericardium, shewing livid spots ; blood in the vessels and ventricles, or auricles of the heart, livid, dissolved, and fetid ; but, indeed, in the fiery heat of *Jamaica*, and other *West India Islands* ; all animal substances for food in a very few hours after death, tend to putrefaction.

IN THE ABDOMEN, OR LOWER BELLY.

ON making the incisions, a horrid stench follows, highly putrid, and the external surface of the abdomen appears livid ; the stomach and intestines, in various parts, marked with livid spots, putrid, and mortified ; the omentum and mesentery, dark coloured and livid, in many parts, and easily tore ; the liver and spleen, gangrenous, or had in part suppurated ; the matter issuing of a brown colour, and putrid in the extreme ; the kidneys little affected, or the urine bladder. *From my journal.*

In Europe, in *hospital*, *jail*, or putrid malignant *petechial* fevers, similar appearances, though not so highly putrid. The petechiæ, or *purple blackish spots* under the skin, ought to be considered, as so many little *gangrenes*, or *mortifications*, expressive of the putridity of the disease.—In these horrid investigations, I strewed spirits and vinegar over the subjects, never
removed

removed the parts, but as little as possible, and made only three or four stitches, in sewing up the bodies, at the umbilicus, in the thorax, or on the scalp, and immediately hurried the corps away for interment. At the *Havanna*, I have read the funeral ceremony over numbers, there being few clergymen, and the bodies after death, were carried about four miles up the *Havanna harbour*, to a tobacco ground ; as throwing them into the sea, had caused infection. The parties attending, all smoaking saggars of the fragrant *Havanna tobacco*, drinking likewise lime punch, rather potent, Huxham's tincture of bark, &c. I took myself. *Insolation* from heat followed, in some *instances* : but not fatal.

When I dissected, which I recommend to others, I wore thin gloves, dipped in oil, in which camphor was dissolved, or used oil of turpentine, and common oil, for the same purpose ; and indeed, when I *felt* the pulses of the afflicted, in these highly dangerous, putrid diseases, as I have observed in my *medical advice to the army and navy*, I always used *camphorated oil* to my hands. The *putrid exhalations* from the *infected bodies*, were dreadfully putrid, even during life, in the last stages of the *yellow*, or other *putrid fevers*, and it is horrid, beyond all description, the stinking effluvia that issue from the dead. By standing to *windward*, when I pursued my dangerous researches, or under an awning, I fortunately was never infected.

More,

More, many more dissections, in all fatal diseases, may be seen in the Latin edition of *Schola Medicinæ Universalis Nova*.

PREVENTION; &c.

FROM the dissections *post mortem*, are the justest indications formed for preventing and attempting the cure of these highly malignant putrid complaints; and they all consist in directing the medical scientific mind to three specific points, which have been, already, most energetically inculcated, namely:

1. To remove, as rapidly as possible, from the place of infection.

2. To correct, as much as possible, or destroy, those putrid active particles, that infect the human species; whether in the *atmosphere* itself, or in the apartments of the diseased. The acquisition of *pure air*, is of the utmost consequence to the non-infected, to prevent the disease, conjointly with wine, bark, snake-root, in decoctions and spirituous tinctures;

tinctures; but above all, the *acid of vitriol* diluted with those remedies.

3. When these calamitous disorders be present, to immediately administer those rational and only successful remedies, that have been thoroughly and repeatedly established by actual long experience.

To avoid all *mixed practice* whatever! but above all, the supposition, that the *early stages* of these diseases were, or should be treated, as *inflammatory*. This last false doctrine is the *rock*, the *dashing destructive rock*, on which the *European Physicians* have always split; hence, *thousands and thousands*, nay, *millions and millions*, have been sacrificed; and the destroyers of mankind have supposed they were proceeding *secundum artem, secundum scientiam veram*, when they, in fact, were pursuing the most dangerous and deleterious errors. When their mal-practices have proved thus destructive, and thousands died, as at *Philadelphia, New York*, in all the *West India Islands*, and in all the Southern parts of *America*, in the warmest regions of Europe; or the burning countries of *Asia, Africa*, in *Spain, the Mediteranean, &c. &c.* they

they have pretended, that *a new disease had made its appearance* ; new indeed, to the inexperienced and prejudiced, but which have been described, by all medical writers, for above two thousand years; by the divine HIPPOCRATES, who lived in Greece, at the time of the *Pelloponesian war*, and by all succeeding physicians, whether *Romans, Arabians, or Moderns.** They have all, all acknowledged the insufficiency and inefficacy of medicine, in many instances, and were merely spectators; and thousands have rather chosen to perish when afflicted, than apply to an art that was in general so unsuccessful in its attempts, to cure the plague, pestilential, or other putrid malignant infectious fevers.

It was reserved for our time, for the ENGLISH PHYSICIANS, to treat *putrid fevers*, and similar *diseases*, successfully. Let us revere all who have contributed, in the least, to banish *bleeding, saline remedies, or debilitants* of any description, in infectious putrid diseases of hot climates, or seasons, arising from contagious destructive *miasmata*. Though, it must be
con-

* See the History of Physic, ancient and modern, in *Schola Medicinæ*, &c. either Latin or English edition, in which is an Analysis of all the Writings of Hippocrates, &c. translated from the Greek.

confessed, that in the writings and practice of some real improvers, may be found inconsistent contradictory doctrines and remedies, which have been remarked; yet, let us seize their beauties, and avoid their little errors and deformities. Let us relinquish all narrow selfish conceptions, or considerations; let us abandon pride, obstinacy, and prejudices, in favour of false systems, and destructive doctrines of the hypothetical schools, and be determined by *facts*, by *truths* that are incontrovertable. By their works shall ye know men, not by professions: and, by a *comparative view* of the mal-practices, erroneously adopted with the present improvements in *curing putrid malignant diseases*, should our conclusions be humanely determined.—It may put us in mind of *past* errors, and this should lead us to listen with attention, humility, and candor, to those *real* improvements, that may be the salvation of mankind in all future ages, when labouring under the baneful influence or the destructive effects of pestilential and putrefactive affections, which destroy armies, and depopulate countries, more than the sword.

In addition, likewise, it may be observed, that many *putrid fevers* have arisen from numbers of human beings, having been confined in a close place, as happens, when too many *recruits* are under ships *hatchways*, in small transports; and, to the unfortunate *negroes*, in the horrid *slave trade*, which the humane and Honorable Member, *Mr. Wilberforce*, has so regulated, by his senatorial information in parliament, as to have greatly improved their wretched condition, and at least, preserved their lives, during their melancholy voyages, from their unfeeling African regions to our West India Islands.—I am no stranger to this traffic, and rejoice in reflecting on the improvements enforced, by acts of the legislature; through the benevolent interference of that justly admired philanthropist.*

The general Treatment of putrid malignant Fevers, so as to form, as far as the Power of the medical Art extends, rational expectations of Success.

1. FOR these salutary purposes, all the objectionable methods delivered in former writings

* In our courts of judicature much improvement might be introduced, with regard to purifying the air, where are numerous persons crowded together.

ings, for above these last 30 years, and exhibited at the end of this little tract, are to be strictly avoided.

2. The *first* and *grand indication* of treatment, that presents itself, and which should always be uppermost in the practitioners mind is, to spiritedly repel, oppose, and restrain with appropriate *antiputrid* remedies, the putrid diathesis, or disposition to rapid dissolution of the fluids, and destruction of the solids.

3. To remove the pressing causes, as early as possible, that occasion increased bilious secretion, producing inordinate action in the duodenum, pylorus, stomach, and intestines, from vitiated acrid and putrid bile, by *antiseptic* purges.

4. To check the blood's vehement action by removing the putrid causes, first acting on the nervous system, and secondarily, on the arterial, venal, and absorbent; by the free use of the *vitriolic acid*, *snakeroot*, *bark*, *camphor*, &c.

5. To prevent, as much as possible, the patients breathing in the *same air*, where they first received the dreadful infection, by removal.

6. To

6. To contrive by a judicious choice of place, that the afflicted shall have a *stream of pure air*; so that in respiration, none of the putrid particles emitted from the lungs, shall be received by inspiration again, and thus conveying fresh fuel, to the destroying febrile fire.

7. To prevent all noxious particles arising from bed, and other cloaths, curtains, &c. feces, urine, putrid hæmorrhages, &c. by a speedy and attentive removal of all those, and other causes, that augment the putrid tendency, and increase the poisonous, putrid particles, or *miasmata*, so horridly destructive in their effects.

8. To cleanse the mouth, tongue, fauces, nose, teeth, gums and lips, of all putrid filth, or blackish sordes, by solutions of borax.

9. Besides ventilating the room, every means which art, or opportunities may permit, or wisdom can suggest, should be put in force to purify the surrounding air of the apartments; the windows, and all outlets of which, should be open; and whatever may be burnt, prepared, or used for these purposes, they should

always be placed to *windward* of the patients, if practicable, that the fumes or vapours may proceed to the diseased, for the purposes of purer respiration.—In this indication, likewise, visits should be regulated. The medical practitioner should preserve his own person from infection, by always recollecting to stand to *windward* of the afflicted, that the putrid effluvia may not infect, while performing the most humane duties of the medical profession.

NAUSEA AND BILIOUS, OR OTHER VOMITINGS.

The causes are to be removed, not by *emetics*, nor by saline purgatives, and tartar emetic, but by promptly attempting the evacuation of bile, &c. downwards, through the inferior, intestinal canal, by the following, or similar remedies.

1. By calomel and rhubarb, five grains of the former, and 10, 15 or 20, of the latter, in currant jelly, treacle, syrup, or by any other proper purgative.

2. By

2. By decoctions of tamarinds and senna, and tincture of senna, with rhubarb, taken in small doses every half hour, until they copiously operate, to which may be added jalap.

3. By an electuary made soft, of pulp of tamarinds, cremor tartar powdered, rhubarb, and aromatic species, given in the dose of a pap spoonful at a time, often, until it operate freely.

4. By a powder composed of two thirds of powdered cremor tartar, and one third of rhubarb, with a little ginger, or aromatic species, repeated until it operate.

5. By lenitive electuary and rhubarb warmed with any aromatic.

6. In short, by whatever the practitioner may think most judicious, according to existing circumstances, except by *saline purgatives*, that may answer the grand purposes of intestinal evacuation, and carry downwards the irritating bile, and similar causes.

TO OPPOSE THE PUTREFACTIVE TENDENCY, not by BLEEDING, nor COOLERS
E 3 of

of *neutral salts, nitre, &c.* but by ANTISEPTICS, as soon as possible administered. The disorder is rapid, and the remedies must be decided, and prompt, or death is soon the consequence.

THE ANTISEPTICS, OR ANTIPUTRIDS
ARE,

1. The VITRIOLIC, or what is now called SULPHURIC acid, the most important of all, diluted *zincum vitriolatum, &c.*
2. SNAKEROOT, in powder or decoction.
3. BARK, or cortex peruvianus, in powder, decoctions, tincture, powdered myrrh, &c.
4. WINE, or spirits, diluted and acidulated with vitriolic acid.
5. CASCARILLA, QUASSIA, in decoction with aromatics, and acidulated with vitriolic acid, if good bark be not procurable; for this last drug, as before observed, for many years has degenerated, or with difficulty acquired in its former degree of perfection and efficacy.
6. Strong

6. Strong solutions of camphor, with full doses of *spiritus ætheris vitriolici compositus*, or what is called *Hoffman's Anodyne Liquid*.

7. Acid drinks, as *infusum rosæ*, or what was originally called *tincture of roses*; *lime punch*, strong of the acid, but not of the spirit. Where these may not be procurable, the acid of vinegar; water and honey makes a pleasant antiseptic drink; but not nearly so efficacious as the *acid of vitriol diluted*, which holds the first place, and without which, the bark is often inefficacious.

8. PURGINGS, unless extremely weakening, at first, are not to be suddenly restrained by opiates: but if necessary, the *confectio opiata*, or its species, *mithridate*, *venice treacle*, &c. are to be administered. It is not from any predilection to these latter enormous compounds, they are mentioned; but as one preparation may not always be procurable in different countries, another of similar properties may be applied. Indeed, *laudanum* and aromatics will, in general, answer the purpose; but it should be remembered, that *opium* has no properties in counteracting a putrid dissolution of the fluids, and may, if injudiciously applied,

plied, restrain that obnoxious putrid matter, that should be ever evacuated. *Sed est modus in rebus.*

9. The brown, or black incrustations on the surface of the parched tongue, mouth, and gums, must be detached and removed by a solution of *borax* and honey, which admirably deterges those parts, and renders the afflicted more comfortable, even under the most threatening circumstances of these putrid malignant infectious fevers.

10. These are the general principles and practices of treatment, that have proved successful in the most dangerous cases, in all hot and other more temperate climates; but as *Fomula Medicamentorum* may be more agreeable and useful to the juvenile practitioner; the following may be used as situation, climate, cases, ages, sexes, habits, and circumstances require, according to the penetration, good sense, and judgment of the prescriber.

FORMULA MEDICAMENTORUM.

THE first object is, to solicit the morbid causes of yellow, brown, or black bile, &c. in the stomach, to descend through the intestinal canal to the *rectum*, to be evacuated by means of antiseptic laxatives, or clysters. *Vomits*, by forcing blood into the head, often produce rapid *delirium*.

R. Pulv. Rhei gr. x.

— Crem. tart. ʒi.

Spec. aromat. gr. viij. f. pulvis secundâ
vel tertiâ quâque horâ sumendus in
pauillo mellis vel syrupi simplicis, su-
perbibendo coch. ij. misturæ sequentis.

R. Infus. sennæ ʒviij.

Tinct ejusdem ʒj. M. f. mistura.

ENEMA ANTISEPTICUM.

AN ENEMA, OR CLYSTER.

No. II.

R. Tinct. jalap. ʒij.

Infus. sennæ ʒviij.

Pulv. crem. tart. ʒj. solve f. enema pro
re nata injiciendum.

No. III.

No. III.

R. Pulp. tamarindorum ʒiʒ.

Infus. sennæ ʒvij.

Tinct. ejusdem ʒi.

Pulv. Rhei. ʒj. f. mistura de qua sumat
coch, j. vel ij. omni semihora, vel hora
donec alvus respondeat.

ELECTUARIUM PURGANS ANTIPU
TRIDUM.

No. IV.

R. Pulv. crem. tart. ʒiʒ.

Spec. aromat.

Pulv. Rhei. ana ʒij. syr. simp. g. S. f.
elect. cujus capiat Q. N. M. sæpe,
donec alvus respondeat.

If it be thought that calomel may act more promptly, with rhubarb, or jalap in powder, there can be no objection, only recollecting that it is an antiseptic purgative.

LAXANTIA HEPATICA MINERALIA.

No. V.

R. Calomel. ppt. gr. v. vel. x.

Pulv. Rhei gr. x. vel. xx. f.

Pulvis, cum pauxillo syrupi sumendus.

No. VI.

No. VI.

R. Calomel. ppt. gr. x. vel. xv.

Sacchar. alb. ℥i. f. pulvis in pauxillo
mellis sumendus.

By these, or similar means, the first indication, or object of evacuating the contents of the stomach, is, in general, answered.



*Resisters of the Putridity, or the
second indication to be immediately
taken after appeasing vomiting, and
producing intestinal evacuation.*

No. VII.

SYRUPUS CORTICIS PERUVIANI ANTISEPTICUS.

R. Extract. Cinchonæ (cort. peruv.) ʒß.

Solve in aq. pur. ʒijß.

Acid vitriol. dilut. gr. ult. xxxx.

Syr. simp. ʒß. f. syrupus. cujus sumat
coch. minimum vel parvum secunda
vel

vel tertia quaque hora, secundum potestatem morbi, superbibendo coch. j. misturæ sequentis.

MISTURA ANTIPUTRIDA.

℞. Decoct. cort. peruv. ℥viß.
 Tinct. ejusdem Huxham. ℥iß.
 Acid. vitriolic. dilut. ℥j.
 Pulv. Rad. Serpent. Virginian. ℥j. f.
 mistura.

MISTURA FORTIOR ANTIPUTRIDA.

No. VII.

℞. Pulv. cort. peruv. ℥iij.
 — Radic, Serpentar. Virg. ℥j.
 Decoct. cort. peruv. ℥xiiij.
 Tinct. ejusdem. Huxham. ℥iiß.
 Elix. vitriol. acid. ℥ij. M. cujus sumat corh.
 ij. vel iii. secundâ quâque horâ post operationem medicamentorum laxantium.

HAUSTUS ANTIPUTRIDUS.

No. VIII.

℞. Extract. cort. peruv. ℥ß. solve in.
 Decoct ejusdem ℥xiv.

Tinct.

Tinct. ejusdem Huxham. ʒij.

Elix. vitriol. acid. gtt. xvj. f. haustus
tertia, vel quâta quâque horâ sumendus.

PILULÆ ANTISEPTICÆ CUM HAUSTV
ANTISEPTICO.

No. IX.

R. Extract. cort. peruv. ʒj.

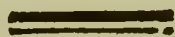
Gum. myrrh. ʒß. contunde benè, f.
pilulæ No. xvj. quarum sumat iv.
quartâ, quâque horâ superbibendo
haustum sequentem.

R. Tinct. cort. peruv. Huxham. ʒß.

Aq. cinnam. ʒiß.

Acid. vitriolic dilut. gutt. xvj.

Syr. cort. aurant ʒj. f. haustus.*



FOR PREVENTING PUTRID DISEASES
CONJOINTLY WITH PURE AIR.

DECOCTIONS of bark and Virginian snake-
root, with Madeira wine, and elixir of vitriol
F acid

The elixir vitriolic acidum, vel acidum vitriolicum dilutum,
may be used.

acid may be used ; with or without *powder* of *bark* and *snakeroot* :—or, to a bottle of red wine or white, may be added three quarters of an ounce of *powdered bark*, and one quarter of an ounce of *powdered snakeroot*, and may be shaken together, to which may be added three tea spoonfuls of *acid elixir of vitriol*.

These remedies should be taken by all who attend the sick ; by all who are likely to become victims to *putrid infectious fevers*, *three* or *four times* in the day, in the dose of *three* or *four* table spoonfuls. They frequently prevent the infection from spreading, secure those who are not infected, from the effects of the contagion, especially if great cleanliness be observed ; both in houses, streets, towns and cities, and all infected cloaths be removed, cleansed, baked in an oven, fumigated, &c.

If wine be not attainable, half a pint of brandy, rum, gin, or any proof spirit may be added to three quarters of a pint of water, to which may be added the same quantity of *bark powdered*, *snakeroot*, and *acid elixir of vitriol*.

This ought to be given to all nurses, and servants, who attend in *spreading putrefactive fevers*.

fevers.—Those who risk their lives in these humane duties, ought to be preserved, as much as possible, from the destructive infection.

In cases where the *bark* and *acid* of *vitriol* may prove purgative, which however, in the first hours, should not be checked too suddenly by opiates; other *antiputrid remedies* may be prescribed, when the irritation of the stomach may be appeased.

ELECTUARIUM ANTIPUTRIDUM CUM
MISTURA CONTRA DIARRHŒAM.

No. X.

R. Pulv. rad. Serpent. Virg. ʒvi.

Spec. aromat. ʒij. Syr. Simp. q. f. Electu-
arium cujus sumat Q. N. M. tertia
quaque hora superbibendo coch. iij.
misturæ sequentis.

R. Camphor. ʒiſs.

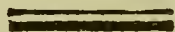
Spirit. vin. rect. ʒvi. M.

Mucilag. gum. arab. ʒvi. contere, bené
deinde adde.

Aq. pur. $\bar{z}$ xv.

Liquor. anodyn. Hoffinan. $\bar{z}$ ss. M. f.
mistura.

In case of the diarrhœa, or purging continuing so as to debilitate, and requiring restraint, *decoctum ligni campechensis*; with 20 to 30 grains of *mithridate*, *Venice treacle*, *philonium romanum*, or our *confectio opiata*, or its species, may be advantageously prescribed; or to the above mixture 40 drops, or more, of *tinctura thebaica* (laudanum) may be added.*



DRINKS.

TO these remedies as drinks, decoction of logwood acidulated, the *tinctura rosarum*, or the *acid* of *vitriol* diluted and made into punch. The vegetable acids are less powerful than the *sulphuric*.

Such are the general and successful modes of treating *putrid malignant fevers* and diseases, *gangrenes*, *mortifications*, &c. &c.

Interveners

* As astringents and antiseptics vitriolated zinc, (*vitriolum album*) or flowers of zinc, one grain for a dose, dissolved, or four or five of allum may be proper.

Intervening symptoms are to be treated as occasion may require, and the mouth, gums, teeth, and tongue, are to be cleansed with a solution of borax and honey. As the modes I have adopted in the *St. Mary-le-bone infirmary*, for curing these diseases, have been already published; they will be repeated in a future part. By a register of our success kept many years by *Dr. Hooper*, it appears, that in the seasons, when putrid infection has raged with destructive violence, and destroyed 60 or 70 out of 100, in other parts, we have never lost above 6 in one hundred.

It may likewise be observed, that in the old *infirmary*, we were always near the most horrid *putrefactive contaminating particles*, that could have been emitted from the burial ground in its close vicinity, *where heaps* of dead bodies lay together in the most *putrefactive state*.—Those, who came in with common colds and other diseases, in certain seasons, seldom went out without experiencing a *putrid fever*. Under these most deplorable circumstances, the success of the practices, here recommended, was perfectly established. Since we have, by the liberality of our benevolent committee, or guardians of the poor, built a

new infirmary, of which I laid the first stone in 1787, and Dr. Hooper the second: we have still improved our success; chiefly from the construction and sweetness of the wards, which without assuming, might be imitated with advantage. Besides, free air passing in the interior part, we have *apertures* near the *ceiling* for the exclusion of dephlogisticated air, or *putrefactive gas*, arising from human exhalations, &c. Thus, all the wards are as sweet as the best rooms in a gentleman's house. Indeed, the year before last, we had in the *putrid sore throat* and *scarlet fever*, no less than between four and five hundred applicants, who were treated by the modes here published, and while in many parts of London, where *bleeding*, a *feeble* or *mixed practice* were adopted, and many hundreds perished, we lost but *two*, out of between *four* and *five* hundred.

In the most *malignant*, *putrid*, and even *yellow fever*, which we had, at times, nearly equal success attended our treatment, which has been the same for nearly twenty years, since which time, I have been physician to this excellent institution, which in all respects does honour to human nature; but particularly to the noblemen and gentlemen, who are the conductors,

ductors, and administrators of all the departments of the numerous indigent, in this opulent and large quarter of London.*

Some very respectable surgeons in London have made a great mistake, in confounding the St. Mary-le-bone workhouse with the infirmary; the latter always has been, and is, a distinct building. It indeed, receives the poor of this great parish, when diseased; but is formed on a grand plan; where, it is hoped our pupils come out, fraught with as much actual, medical anatomical and chirurgical science, as in any hospital in Europe. *See Schola Medicinæ, &c.*

It is to be seriously hoped, for the sake of humanity, morality, and religion, that neither our ears, nor our eyes, will be tortured with dreadful relations of *ten or twenty thousand* perishing in a short space of time, in one *American* city, and half as many, repeatedly,
in

* Perhaps, there is in no Hospital in *London*, nor any other part of the kingdom, a more extensive medical practice; nor is our surgery practice, under the direction of Mr. Phillips, surgeon to the household of His Royal Highness the Prince of Wales, less important, for all practice, which most commonly occupies surgeons in general.

in others, from *putrid affections*. We find that between *thirty* and *forty thousand* have perished in *Spain* very lately; and as to its merciless ravages in *Gibraltar*, and other neighbouring places, the loss of human lives is incredible. To what is this owing? Let the books that promulgate destructive false doctrines, and their authors answer, who will be much irritated at these truths, and feel *personally* what is strictly intended *professionally*. Whoever may be offended, there is serious duty, which heaven demands, quite superior to any human considerations. To live in peace and harmony with all mankind is highly desirable; but to sacrifice integrity to dastardly fear, is beneath the dignity of any honourable physician.

There were excellent and successful methods of treating *putrid malignant fevers*, long before many of the fabricators of false hypotheses, speculations, and dangerous experiments were born. Are doctrines confirmed by *long experience*, to be abandoned for the *wild effusions* of fancy, conceived by every inexperienced *novus homo*? Lately they have, and a vicious unreflecting credulity has pervaded the whole art. One again revives the
old

old *discarded* doctrines of *bleeding* and *cooling* in *putrid* diseases. Thousands die! Another takes a gigantic stride in the ærial regions of fancy, and becomes *vital air*, or *gas mad*, and infects numbers with the visionary *mania*. Another intoxicated with spirits, and poetic fiction, raves that *brandy* and *opium* will cure all diseases, &c. &c. he is heard, read, and followed. Another talks unintelligibly on *spasms*, *collapse*, &c. in the extreme minute vessels, where no *contraction* or action exists. All the world becomes *spasm mad*, though no one either comprehends or defines what he says, or means. Another runs wild with a supposition, that the *venereal virus* is curable by *nitric acid*. Thousands, who have had trifling infections, and who were certainly curable by the administration of that wonderful specific, mercury, get *carious* bones, lose their *noses*, and suffer a *thousand* other calamities. Then another projector sends *fiery phosphorus* into the human stomach, as a cordial; a remedy that would revive the *dead to life*; the project is read, believed, and practised; the internal *coat* of the stomach is *burnt*, and many human beings sacrificed. Others fly with a *wild* enthusiasm after *magnetism*, or *galvanism*: credulity sanctions, and report and puffing exceed

exceed all possibility ; but the more impossible the assertion, the sooner it is believed ! Hogs are to grunt, pigs squeak, dogs bark, and men hold a discourse with their heads chopped off, by the axe, or guillotine. Wonderful credulity ! wonderful folly ! no bounds are set to human impositions.

Another declares *hemlock* will cure a *cancer*; and *arsenic*, sugar of lead, and the whole class of *poisons* is forced *again* into practice, notwithstanding the wise learned HOFFMAN's dissertations directed by science and humanity on these subjects. Truth is falsehood, falsehood truth, to these projectors.

The poison-mongers are believed ; *henbane*, *digitalis*, &c. are introduced too, by all Europe, except by the sage, deliberating, experienced, and penetrating. The faculty become *hemlock mad*, and though, for near forty years, misery and disappointment have succeeded disappointment and misery ; yet they proceed in the destructive career, as though the *poisonous* method was salutary, and attended with success. Caustic bougies are applied to the most sensible part of man. Caustics ! where no human being can tell the extent and danger of

* *Lead* has often produced a *palsy* of the stomach and intestines. All its purposes can be answered by safer remedies.

of its *burning fiery* properties. This is followed. Temporary relief, in many instances, is acquired; but permanent misery! inexpressible misery! through the remainder of life, is often the direful consequence. Inhumanity, and projects the most irrational that can be conceived, go hand in hand. To abandon solid precepts and successful experience; for visionary conceits and projects, seem the rage and order of the day! Tar water, calves pluck water, quicksilver, living on greens, enormous bleedings, and acids in consumptions, infallible remedies for the gout, gravel, and stone, have all had their day. A thousand other instances of inexperienced vain conceits, or tricks, might be introduced, of daring attempts, to impose fallacies on society, and the profession, which credulity sanctions and applauds *pro tempore*; but afterwards abandons in *silence, grief, shame, and disgust*. What do the projectors and visionists expect? why, if their vain irrational, or artful schemes be but received, there is a probability, during the *furor*, of acquiring riches, of making a fortune. A noble profession! an art sacred to humanity! thus becomes a *mean low trade*, and the traffickers or impostors have as little remorse, as the rapacious monopolist, sophis-

1

ticator

ticator of foods, or cannibals of the most ferocious man-eating regions.

It is time to draw a veil over these and a thousand other shocking enormities; for the discerning are hated, and the guilty are a formidable obdurate host, that may crush the investigating exposé of their professional extravagancies to atoms; who, though not friendless, must stand in his professional career to receive the concealed daggers of *envy*, malice, and all *uncharitableness*, which, as usual, he shall smile at. He is content; if mankind in general benefit by these labours, and he is ready to meet any opposers, publicly, provided they publish their names, and are of sufficient respectability and experience to merit attention. Medical etiquette is to be sacrificed to public utility. No ARGUMENTS, however ingenious, nor no OPINIONS, however plausible, can refute or overcome these FACTS: for FACTS ARE STUBBORN THINGS; they have the sanction of very long practical experience, and they are well known to many of the first practitioners in this metropolis. On these alone, are all the doctrines grounded; on these alone, must they STAND OR FALL.

Preparations and remedies, which are frequently prescribed in the putrid sore throat and malignant fevers, that should be rejected.

Though enough, perhaps, has been advanced concerning the successful treatment of these disorders contrasted with that which is either inefficacious or injurious, yet a brief recapitulation of the whole may not be unacceptable.

I. *Class of improper diluting drinks.*

1. *Tea*, and all watery infusions, unless acidulated with muriatic, vitriolic or vegetable acids.
2. Water gruel, barley water, or any farinaceous drinks, or what are named *diluters*.
3. Almond emulsion, capillaire syrup and water, or orgeat.
4. Rennet whey, wine whey, and all warm sudorific drinks.

II. *Class of improper saline remedies.*

ALL saline preparations, composed of the *vitriolic acid*, and the *vegetable* or *fossile alkali*, &c.

1. Glauber's purging salts.
2. Epsom salt, or *sal amarum catharticum*.
3. Rochelle salt.
4. *Sal polychrest*.
5. Soluble tartar.
6. *Sal enixum*.
7. *Arcanum duplicatum*.

G

8. Nitrum

8. Nitrum stibiatum.
9. Nitrum vitriolatum.
10. Sal nitre, or sal prunell.

III. *Class of remedies, composed of the vegetable acid, and the vegetable, fixed, volatile alkali, which are improper.*

1. *Saline draughts*, composed of salt of wormwood, and lemon juice.
2. Spiritus Minderarii, formed from vinegar and volatile salt.
3. Sal diureticus, made from acetum and fixed alkaline salt.
4. Volatile saline draughts from the union of lemon juice and the volatile alkaline salt.
5. Magnesia alba is improper *while* acids are administered, as it forms a neutral salt.
6. Testaceous powders and *confectio cardiaca* must not be given for the same reason.

Other exceptionable practices.

1. Bleeding.
2. Nitrous or other improper gargles.
3. Vomiting.
4. The detention of patients in bed.
5. Blistering.
6. Promoting perspiration by James's powder, tartar emetic, &c.
7. Checking purgings suddenly by opium.
8. Not cleansing the ulcers of the throat.
9. Suffering the patients to sleep.
10. Not freely admitting fresh air.
11. The giving animal broths, milk, beef, jellies, &c.

12. Volatiles.

13. The depending upon inefficacious remedies.

14. The not administering the bark, &c. on the first appearance of the disease.

Necessary remedies.

Laxatives.

1. Antiseptic laxatives of senna.
2. Tamarinds.
3. Cremor tartar and rhubarb.
4. Tincture of senna.
5. Infusion of chamomile flowers and senna.
6. Compound powder of senna.

Gargles.

1. Gargles, composed of elixir of vitriol, acid or spirit of vitriol and water.
2. The tincture of roses, &c.
3. Tincture of myrrh, tincture of bark, and camphor julep.
4. Vinegar and sage tea.
5. Currant jelly, or currant juice with water, &c.
6. Red port and water.
7. Borax honey and water.

Antiputrescent remedies for internal use.

1. Bark in powder.
2. Aromatic species or powdered ginger.
3. Extract of bark in cinnamon water.
4. Huxham's tincture of bark added to mixtures.

5. Decoction of bark with the acid of vitriol.

6. Powder of snakeroot with the bark.

7. Tincture of snakeroot. These are rarely necessary.

8. Acid elixir of vitriol, from 10 to 20 drops in a dose.

9. Sweet elixir of vitriol, from 40 drops to one dram and a half.

10. Hoffman's anodyne mineral liquor, from 20 to 60 drops.

11. Camphor.

12. Bitter spirituous tinctures.

Drinks.

1. Tincture of roses.*

2. Water acidulated with the acid of vitriol.

3. Lemonade.

4. Cremor tartar, dissolved in water, called Imperial.

5. The acid juices of fruits with water.

6. Currant jelly dissolved in water.

7. Orange juice and water.

8. Red port, or red port and water, negus, &c.

Remedies to remove or counteract the causes of purgings.

1. Powder of rhubarb, to 20 or 30 grains.

2. Extract of logwood, dissolved in simple cinnamon

* This composition has been recommended in putrid diseases above an hundred and sixty years. Poterius says, "*Usus est in febris putridis, cor exhilarat, & ardorem febris compescit sitim etiam extinguit.*"—*VERUM EST.* W. R.

cinnamon water, two drams of the former to six ounces of the latter.

3. Japan earth powdered, in cinnamon water, two drams to six ounces.

4. Dulcified elixir of vitriol to a tea-spoonful and a half, with any of the before-mentioned compositions.

5. Hoffman's anodyne liquor to 60 drops in simple cinnamon water.

6. Opiates, if absolutely necessary.

Domestic management.

1. Purifying the air of the room.
2. Removal from the infected place, or to an upper airy part of the house.
3. Fumes of vinegar.
4. Explosions of gun powder.
5. Burning of Frankincense.
6. —————Benzoin.
7. —————Pitch.
8. —————Resin.
9. —————Shavings of yellow saunders.
10. —————Tobacco.
11. —————Lavender, rosemary, &c.
12. Morveau's and Dr. C. Smith's methods.

Other regulations in the sick chamber.

1. Patients to sit up as much as possible.
2. Linen to be daily changed.
3. Bed curtains to be taken down.
4. All woollen or cotton clothes to be removed.
5. Few visitors admitted.
6. All evacuations to be immediately carried out of the sick room.

7. The room to be kept cool and airy.
8. No broths or animal diet whatever to be admitted.
9. Sleep never to be long indulged.
10. The mouth and throat to be frequently gargled, and the remedies often taken.

Foods or aliments.

1. Panada, with wine or brandy.
2. Sago.
3. Salop.
4. Simolina.
5. Tapioca.
6. Rice.
7. Barley pudding.
8. Roasted apples and bread.
9. Any acid fruits with bread soaked in wine.
10. Arrow root powder.

These remedies or foods are to be occasionally prescribed, excluded, or varied, according to the judgment of medical practitioners; every one has a just right to administer whatever, in repeated instances, may have been found salutary, only recollecting, that all septic medicines are improper in disorders of a putrid nature, and that single instances of success ought never to be a guide for general rules; for the most destructive practice ever conceived by man, may be sometimes successful, owing to the resistance of a firm and sound constitution.

ON THE
UTILITY AND IMPORTANCE
OF THE
GUN-SHOT SETON NEEDLE,
FOR
PRESERVING THE INTEGUMENTS.
AND
PREVENTING CUTTING
IN
THE CURE
OF
GUN-SHOT WOUNDS,
BY
WILLIAM ROWLEY, M. D.

Member of the University of Oxford, the Royal College of Physicians in London, Physician to the St Mary-le-bone Infirmary, and public Lecturer on the Theory and Practice of Physic, excluding false Systems, &c. &c.

London :

PRINTED BY J. BARFIELD, WARDOUR-STREET,
Printer to His Royal Highness the Prince of Wales.

1804.

ON
THE IMPORTANT USE
OF THE
GUN-SHOT SETON PROBE, &c.

EVERY invention that may ameliorate the condition of the wounded soldier, or sailor, must merit the approbation of all candid practitioners in surgery, and the public in general.

At this tremendous moment, when a military ardour inspires the whole country, and all who are able to bear arms are disciplined soldiers; at a time when the country is menaced with invasion by a formidable, experienced, and military foe, it is not only the duty of every loyal subject to brave the dangers of the field, in support of our gracious Monarch, and free Constitution; but it particularly behoves the medical profession to communicate and embrace every improvement,
that

that may tend to diminish the pain and other grievous accidents, ever attendant on dreadful warfare.

BRIEF OBSERVATIONS ON GUN-SHOT
WOUNDS.

GUN-SHOT wounds include those that are inflicted from great guns, or artillery, and small arms.

The mischiefs arising from artillery on land, and those in naval fights, differ; for dreadful lacerated wounds frequently attend the latter, which rarely happen in the former.

The treatment of gun-shot wounds is well understood by military and naval surgeons, according to the rules of art, though still capable of improvement.

I.

The cure of lacerated wounds, consists in removing all extraneous bodies, as much as possible, without violence, extracting grumous blood, deterging the parts, bringing them into
their

their original situation, and according as inflammation, suppuration, &c. permit, retaining them by ligatures, compress, and proper bandage, with appropriate dressings, according to existing circumstances.

II.

Most wounds inflicted by gun-shot, are contused and lacerated; they generally *swell*, inflame, suppurate, create fever more or less, cast off sloughs, and purulent pus issues, before they are in a state to heal. They are not poisonous, as formerly imagined, nor do they heal by adhesion, like fresh incised wounds.

III.

Pieces of garment, the bullet, shattered loose bones, or other extraneous bodies, are to be, if possible, extracted; but if this be impracticable, without force or violence, it is proper to patiently wait suppuration, exfoliation of the bone, &c. to place the patient in the situation he received the wound, after the sloughs are separated, and the extraction then of foreign bodies is often effected, without violence, or they pass spontaneously.

IV. Vio-

IV.

Violence should never be used, particularly in cavities, in probing for the ball or extraneous bodies. *Ravaton, La Motte, La Faye*, my preceptor the great *Moreau*, at the Hotel Dieu, and *M. Sabatier* of the Hotel des Invalides, and all excellent military surgeons, condemn unnecessary probing, and I have seen it do much mischief from the vicious curiosity of inexperience.

V.

The stages of *inflammation, tumefaction, suppuration, vulnerary fever*, and *separation* of the contused parts, all succeed in order, and are all to be managed by external applications, and internal remedies, according to the most improved rules of art, which must depend on the anatomical skill, sagacity, and practical knowledge of the artist. Precepts, however, may be collected from writers on Gun-Shot Wounds, that may be followed; when large or profuse bleedings, so much recommended by the French; dilating too freely, as practiced by the English, and an indiscriminate

nate antiphlogistic regimen and remedies be excepted.*

VI.

Incised wounds, by the broad sword, are cured, in general, by adhesion, that is, by uniting the parts, and applying plaisters, compress and proper bandage to retain them in a proper situation, unless the bone be injured; in which case, slow exfoliation follows, before the wound can be perfectly healed.

VII.

Punctured wounds from *bayonets*, or the *small-sword*, *stiletto*, &c. commonly inflame and suppurate, before they heal, and if they happen in tendinous parts, or in the aponeurosis of muscles, &c. they frequently, as likewise do Gun-Shot Wounds, cause convulsions, *trismus*, or locked jaw, and death in hot climates; to which cases I often have been a spectator, without any power to prevent the fatality, by any of the medicines generally recommended,

H

as

* Wiseman, Dionis, La Faye, Ravaton, La Motte, Belgner, Surgeon to the armies of the great King of Prussia, Bell, Sir William Blizard, Plenck; and lastly, the ingenious Mr. Chevalier, whose Treatise is excellent.

as musk, camphor, opium, &c.* Formerly they sucked punctured wounds, which extracting the effused blood, disposed them to heal. Blood suckers even attended armies, of whose office there are many ridiculous accounts.

VIII.

Wounds that penetrate into the thorax, or abdomen, should never be probed out of a wanton curiosity. Experienced men, generally can tell by the symptoms and anatomical science, what wounds are likely to prove fatal, and what not; yet extraordinary instances of cure happen even in wounded brain, lungs, and other viscera, &c. but these are rare instances, and no rule for practice.

IX.

FASCIA, in a great state of tension may be, in some cases, advantageously incised, transversely, or in other directions, according to circumstances, but this is safer in Europe than
in

* There are some cases cured at the St Mary-le-bone Infirmary, published in my book on Nervous Diseases, chiefly by calomel, sulphur, antimon. præcip. large doses of camphor, &c. but the same remedies might not have succeeded in the West-Indies.

in hot climates; for in the latter, locked jaw succeeds, and death closes the painful scene.

X.

Many dreadful wounds, for which surgeons generally amputate, particularly of the joints, &c. have been cured without that operation, which the celebrated and excellent practical army surgeon, Mr. Belguer has fully proved. The humane doctrines of this writer are worthy of attention, and, in some cases, of imitation; they are founded on actual experience and success.*

XI.

Most army and navy surgeons have attempted the extraction of the ball, or extraneous bodies, as soon as possible, and they are accustomed to dilate or enlarge the wound, most unmercifully, for this purpose. This conduct is not always the best practice; nor is it always practicable without much injury; but the *Gun-Shot Seton Needle*, may often

H 2

su-

* The great Frederic of Prussia, being very sensible himself, and very discerning, could distinguish sound science, from its plausible appearances; and he protected learning and abilities wherever they were discoverable.

supercede the necessity of their dilating doctrines being practised in numerous instances.

XII.

The ill consequences of extraneous bodies being left, are, in general, inflammation, pain, abscess, suppurations, &c. fever, sometimes hectic with wasting the body. In many of these cases, the *Gun-Shot Seton Needle*, to be described, becomes very useful.

XIII.

Great hæmorrhage in bullet wounds, I have observed, is not common at the time of receiving the wound; but when great bleeding from wounded arteries happen, they must be taken up, and secured, so that anastomosing branches may not communicate. This is done by making ligatures, both *above* and *below* the part of the artery wounded. Such cases are not to be neglected, until the wounded reach the hospital, least death ensue from profuse bleeding. There is frequently a secondary hæmorrhage about the twelfth or fifteenth day, when sloughs are thrown off, and sometimes the sanguineous effusion insinuates itself into the cellular texture, producing

ducing suppuration, gangrene, death. Scarification of the mortified parts, and warm spirituous terebenthinate dressings, are, in such cases, necessary; but above all, the bleeding arteries must be always secured.

XIV.

Though dilating gun-shot wounds, may be often dispensed with; yet there are some requiring that operation, as *profuse bleeding* from arteries, and sometimes to extract *shattered splinters of bone*, &c. but in wounds of softer parts, it is rarely necessary, where it is, the finger, as in many other instances, is the best director for dilating.

XV.

The treatment of gun-shot wounds is to be various, as they may be recent, or in succeeding stages, according to constitutions, climate, seasons of the year, age of the party, and other particulars; with regard to the part, or parts wounded, whether it may be an animal, vital, or natural function.*

H 3

These

* Wounds are simple of the integuments, complicated, when arteries, great nerves, tendons, muscles, or bones are hurt.

These are only general hints arising from my own experience and observations, when in His Majesty's Service, in the war from 1760, to 1764, in Europe, West-Indies, East and West Florida, America, &c. I went into the
service

Mortal wounds are :

1. Those, which impede the nervous influx from the brain to the viscera.

2. Which destroy the circulation of the blood, as in the heart, &c.

3. Which prevent respiration, as in the lungs, aspera, arteria, &c.

4. Which effectually impede chylicification.

5. Which cause extravation in parts, that cannot be removed.

In the **FIRST**, are deep wounds of the brain, medulla oblongata, spinalis, of the eighth and intercostal nerves.

In the **SECOND CLASS**, penetrating wounds of the heart, its auricles, sinuses, and of all large arteries and internal veins.

In the **THIRD CLASS**, belong wounds dividing the trachea, bronchia, large wounds of the lungs, diaphragm, or nerves of the diaphragm.

Of the **FOURTH CLASS**, are wounds dividing the œsophagus of the stomach, intestines, small or large, gall bladder, pancreatic duct, receptaculum chyli, or thoracic duct.

To the *fourth class belong* extravations of blood in the brain, in the cavity of the vertebræ, in the pericardium, in the posterior duplicature of the mediastinum, in the cellulous cavity of the loins; in the cavity of the pelvis. Many wounds, however, not in dangerous parts, prove fatal, either from a bad constitution, or from injudicious treatment; or from climate, accidents, &c.

service merely to examine, by ocular demonstration, *Gun-Shot Wounds*; the utility of the dilating doctrines were then doubted, milder methods succeeded, and they will now be communicated.*

INTERNAL TREATMENT.

The internal treatment, that facilitates the cure of gun-shot wounds, depends on the magnitude, situation, nature of the injury, strength of the patient, seasons of the year, country, and climate.

I.

In all profuse suppurations, or great discharges from wounds in hot climates, and particularly in hospitals, where generally contagious diseases reign, the *cortex peruvianus*, *spices*, *snakeroot*, *acid of vitriol*, *spirituous tincture of bark*, and a moderate use of wine, are

* At the Havannah, and other places in the West Indies, I saw the fatality of the antiphlogistic plans of cure in putrid fevers. From that time to this, I have always treated contagious putrid fevers with the acid of vitriol, bark, &c. At the St. Mary-le-bone Infirmary, for near twenty years, the success of those methods have been confirmed in thousands of cases, which is well known, likewise, to the whole profession.

are expedient, in proportion to the danger of the case, and the debility of the wounded. To which must be added, a free circulation of *pure air*, or all medical efforts to cure the wounded, or febrile, must prove abortive. Spiritedly resist putrefaction, and support the constitution;* or death is often the consequence.

II.

If gangrene threaten, in cases where amputation may be absolutely necessary; in hot climates, it should be promptly performed; otherwise convulsions, *locked jaw*, and other fatal symptoms, rapidly appear, and soon terminate the patient's existence.

III.

In colder climates, respectable chirurgical authority, recommends waiting the *separation* of the gangrenous, or sphacelated parts from the *sound*, before amputation, at the same time judiciously prescribing bark, vitriolic acid, snake-

* See the doctrines in the Treatises on the Putrid Sore Throat, Scarlet and Putrid Fevers, where the errors of bleeding, and saline remedies, are manifest.

snakeroot, cordials, &c. &c. but if this sensible practice be too strictly followed, *putrid absorbtion* excites *putrid fever*, and death may ensue. *Est modus in rebus*. There are no rules without exception. In actual practice, much must depend on the sagacity, foresight, and experience of the practitioner, and he will succeed best, who is not prejudiced in favour of false systems, or whimsical crude conceits, formed by inexperience.

IV.

In those places, and indeed in every hospital in Europe, I sought judicious experienced practitioners, famous for anatomical and practical science, from whom I have often received information and instruction ; for, above all things, junior surgeons should solicit and attend to the practical precepts and admonitions of the experienced. There is such an immense field of variety, in gun-shot wounds, and, indeed, in the whole medical practice, that neither books nor lectures can equal their diversity, so prototype are their actual appearances, and so different are their events.

The

The present tract, however, is intended to contain a few observations on the modes of treating penetrating wounds inflicted by *pistol*, *musket balls*, or *splinters*, on board of ships, &c. and to communicate a milder practice than has hitherto been adopted.

ON DILATING GUN-SHOT WOUNDS.

After the Scotch rebellion of 1745, Mr. Ranby, Serjeant Surgeon to his Majesty King George the Second, published a short Treatise on Gun-Shot Wounds, censuring the rough and irrational modes of treatment, particularly in the extraction of bullets, &c. by the ill-contrived forceps, and other instruments.

This celebrated surgeon introduced another practice, which was in great reputation, when I was in the country's service, above forty years ago, and it has continued to this very period, in a certain degree.

This was called *dilating*, enlarging, or cutting the contused gun-shot wound freely, in the direction the bullet had penetrated.

1. To open the vessels that they may bleed.

2. To enlarge the wound, that, during the inflammation, it may have room to swell.

3. That large incisions changing the nature of the wound, the bottom is seen, bleeding arteries are taken up, and the ball, or extraneous bodies extracted.*

It was thought a great improvement, and under the sanction of His late Majesty's serjeant surgeon universally followed by all the surgeons in the navy and army. Indeed, no person could pass an examination at Surgeon's Hall, who did not acquiesce in the dilating system. Sad havock was frequently the consequence.

CUTTING

* The brave experienced sailors, who have seen actual service, I have observed before an action, they have thrown off their jackets, shirts, or other cloathing, except their trowsers and shoes, on this principle; lest a part of the jacket, shirt, &c. should be driven in before the bullet, in battle, should they be wounded.

CUTTING FREELY, as it was called, was the order of the day, and it was shocking to humanity to see abscesses rudely opened, and large pieces of the integuments cut out, even in buboes, and almost all sinuous abscesses; in the psoas case, I have seen half the muscles of the thigh laid bare, and the unfortunate patients sink under the immense discharge. A milder method has been practised, in this case, by the ingenious Mr. Abernethy, and the reverse of that practice is now adopted, by which the skin and integuments are preserved, as much as possible in most operations, and it is attended with great advantages. In the French hospitals that fierce cutting practice was never approved, though some of the German surgeons followed it.

In gun-shot wounds dilating largely, and an unnecessary use of the knife were, frequently considered the criterion of skill, courage, and excellence.

I was educated in this school, with all its cutting prejudices; but on reflecting, and making observations, and taking a comparative view of practice, and endeavouring to select the best, those horrid barbarous methods

thods were early relinquished in favour of others, which appeared milder : and on trial, were found much more successful ; for they were less painful, and expedited the cures.

SOME OBJECTIONS TO FREELY DILATING IN GUN-SHOT WOUNDS.

1. It is not necessary, except in particular cases.

2. If the ball should have taken an oblique direction, which every one conversant in gun-shot wounds, must know, very frequently happens, or a transverse penetration quite different to the muscular fibres ; if the cutting knife follow, to freely enlarge the sinus, innumerable blood vessels must be divided, and a large hæmorrhage or bleeding follows. This happened, as I have been well-informed, at the commencement of the late ten years French war, and much misery and mischiefs were the consequence.

3. If the ball should take a longitudinal direction, proceed deep, and be buried in a muscular part, a free enlargement of the wound by dilating, prolongs the cure for
I many

many months. *Large wounds* require a longer time for incarning than *small*.

4. After the inflammation, suppuration, and separation of the contused parts, vulnerary fever, removal of the ball and extraneous bodies, the *surgeon's wound*, much worse than that inflicted by the *bullet*, terminates in hot climates, frequently in *gangrene*. From the exposure of a large wounded surface, profuse discharges so sink the patients, that they perish by hectic, or other fevers of a putrid nature. In colder climates this large dilating leaves wounds tedious and difficult of cure, and, indeed, sometimes they are incurable.

5. GUN-SHOT WOUNDS take all directions and there are scarcely two cases alike in all particulars: therefore, in dilating, much reflection, judgment, and anatomical skill, are requisite, more indeed, than is sometimes possessed by the inexperienced, and much mischief must be the consequence.

6. LARGE SURFACES laid BARE at JAMAICA, and other West India Islands, I have seen dreadfully destructive, especially if tendons, tendinous expansions, or aponeuroses be injured,

jured, and large suppurations produced. Gangrene, convulsions, locked jaw, and death, have frequently followed injudicious dilating. European placidity will not keep pace with West India rapidity; therefore, it behoves all physicians and surgeons to be upon the alert, and their prescriptions should be as active as the celerity of the disease, or they will be disappointed of success in hot regions.

ON THE GUN-SHOT SETON PROBE;
AND ITS USE.

These large bullet probes are tubular, made of different lengths, and have a seton needle concealed; the metal of which they are made, is the same as the flexible bougies, invented by Mr. Smith, Surgeon, in Tavistock-Street.

1. In all deep penetrating and other gun-shot wounds, where the bullet, or other extraneous bodies remain, a counter opening can be easily made and preserved open, by which a drain, for the matter of suppuration, may be continued as long as necessary.

2. There are two periods in gun-shot wounds, in which the gun-shot seton needle may be very useful; first, immediately after receiving the wound; and secondly, after the inflammation has subsided and suppuration commenced. In the former, except in great cavities, the extent of the wound may be determined, and whether a counter-opening may be useful; in the latter, vent may be given to the otherwise pent up matter.

3. In all irregular suppurations, where the pus may be entangled in the interstices of muscles forming distinct abscesses, or depositions of matter, the gun-shot seton needle may be used, and many large incisions avoided, besides the preservation of integuments, which is of great importance.

4. In all, or most sinuous ulcers, that are the consequence of penetrating gun-shot wounds, and which are frequently difficult and long in cure, the gun-shot seton needle becomes useful, and in these cases supercedes the large incisions of the knife.

5. In many cases, wherein counter-openings may be necessary during the vulnerable fever,

fever, inflammatory, or suppurating stages of gun-shot wounds, when purulent pus coagulated putrid blood, or sloughs are partly evacuating, and partly remain, and free discharges at both ends of the wound may be necessary, the gun-shot seton needle facilitates and assists the evacuation without violence to the parts, and thus the cure of gun-shot wounds is expedited; so that what, in the free dilating treatment, may require months to cure, by this mode of treatment, is effected in as many weeks.

6. The gun-shot seton needle, likewise, may be beneficial in not only determining the situation of extraneous bodies, but assist in dragging them out.

7. In some cases, where the seton needle and seton have been used, the wound, the seton needle makes, may be easily enlarged, as circumstances may require; and the sponge tent, though many years decried by those who know nothing of its important use in sinuses, applied with great advantage.*

8. Much pain, inflammation, and profuse suppurations, are prevented by the gun-shot seton needle, all which large incisions or dilatations generally cause. There are fashions in surgery, as in other things, and a man of whimsical conceits in this art, if elevated to a high station, may promulgate false doctrines to the manifest injury of society, and yet be credited and followed by that majority, who seldom reflect or think for themselves. I have lived long enough to see many fatal consequences from these sources, and false systems, perverting the judgment of the inexperienced.

A VIEW

* The sponge tent is scarcely known, at present, in this country, since Mr. S. Sharpe objected to its use, and the knife was to perform every thing, which I have seen cruelly practised by all the surgeons of my early days. On the Continent the sponge tent is successfully applied. One-third oil, and two-thirds of wax, sponge should be dipped in, when melted, and while cooling, pressed and formed for use, as occasion may require.

A VIEW OF THE CRUELTY OF DILATING, COMPARED WITH THE MILD GUN-SHOT SETON NEEDLE PRACTICE.

Dilating.

1. Making large incisions, under the idea of dilating freely, create proportionally to the magnitude, depth, and length of the cut, wounds of various dimensions; which proportionally to their extent, must require a long time for healing.

2. In freely dilating these contused gun-shot wounds, which must undergo, in general, inflammation, swelling, suppuration,

Seton Needle.

1. In numerous instances of deep-seated penetrating gun-shot wounds; if the gun-shot seton needle be applied, large incisions are unnecessary. The thread of the seton may be retained in the wound or not, as long as the artist pleases, or until the perfect suppuration be completed.

2. By the gun-shot concealed seton needle, being passed through the passage made by the ball, whether the ball may be

Dilating.

and separation of contused parts in sloughs, &c. a large portion of integuments and other parts, are incised and destroyed under pretence of laying open the wound to the bottom. This destruction of the integuments is condemned by the present surgeons of eminence.

3. Where gun-shot wounds are freely dilated, additional large wounds being inflicted by the knife, considerable hæmorrhage frequently follows, the wounds themselves are long before they incarn, and thus cures are unnecessarily prolonged, to the mani-

Seton Needle.

be lodged in the part with extraneous bodies, or have passed through, a counter-opening, without destroying parts by the knife, saves the integuments, &c. facilitates a favourable suppuration, and forms a drain for the discharge of pus, echor, or other matter.

3. By using the gun-shot seton needle in all those cases, where it may be reasonably applied, the hæmorrhage accompanying dilating is avoided; the wounds themselves, likewise, after favourable suppuration and separation of the contused parts, heal

Dilating.

fest injury of the service, exclusive of an increased expence to government.

4. In hot climates too large wounds cause immense suppurations, and in proportion to the extent of the exposed and wounded surface; so must proportionally issue a large exhausting putrid discharge, frequently sinking the wounded soldier, or sailor, and sometimes producing gangrene, maggots, convulsions, locked jaw, and a miserable death.

Seton Needle.

heal with facility. If the orifices be obliged to be kept open the sponge tent may be often applied to the mouth of the wounds with infinite service.

4. The non exposure of the whole sinuous wounded surfaces, diminishes the pain and danger of the wound, wherever practicable, and less apprehension of debilitating putrid discharges, gangrene, or mortification, with convulsions, and locked jaw will arise, wherever the gun-shot seton needle may be safely and judiciously applied; for it must be confessed, it cannot in all cases be useful.

Therefore, this useful instrument is respectfully submitted to the consideration of the army, navy, and medical boards; military and navy surgeons, as an invention, it is presumed, worthy of their attention. It is hoped they will be tried in gun-shot wounds with skill and candor, whatever may be the result, the author has only to say, that if they prove useful to His Majesty's service, he shall rejoice the short remainder of his life, that his studies amongst other medical improvements, as in this instance, have not been directed without benefit to society.

A farther recommendation to the use of these tubular gun-shot probe seton needles is, that they are not expensive, being made of the metal invented by the ingenious Mr. Smith, surgeon of Tavistock-Street, with which that gentleman makes his metallic bougies, catheters, &c. &c.

In the course of the lectures I had the honour to give, and which will be continued, on the theory and practice of medicine, founded on nearly fifty years experience, and on the anatomical demonstrations and dissections, published in *Schola Medicinæ Universalis*
Nova,

Nova, excluding all false systems and hypotheses, and only admitting practical established facts; these gun-shot seton needles were exhibited, and received the approbation of some physicians, and respectable army and other surgeons, who were auditors.

PUBLIC MEDICAL SCHOOLS NE-
CESSARY.

It is much to be lamented; that there are no public medical schools here, as in France, supported by government, where surgeons intended for the army or navy, might receive instructions gratuitously, and where genius might be cultivated; and taught medicine in the manner recommended in *Schola Medicinæ*, and which, on repeated trials for years, have been attended with the greatest success, at the St. Mary-le-bone Infirmary, where I have long presided as physician. For my own part, I am thoroughly convinced, both from reason and experience, of the necessity and utility of such a public national establishment, and I would spare no pains nor endeavours to render it effectually useful to society. We have a Veterinary College for rendering the
treatment

treatment of the diseases of that useful animal the horse scientific, and to relieve their sufferings from the hands of ignorance, supported by grants from Parliament. We have the Royal Institution for Lectures on the Sciences, Arts, and Belles Lettres; we have an Academy for Painting and Sculpture, where genius is encouraged by Royalty, &c. while that divine and most useful of arts, medicine, is left to promiscuous instruction; instruction, which I have fully proved, in many instances, to be radically defective.*

MI-

* Old experienced army and navy surgeons, who had seen much service, could assist much in such an institution, at the army and navy hospitals; and, for the general practice, the most distinguished practitioners in London, might be consulted and employed with advantage. I have already published my sentiments, on the necessity of encouraging the study of anatomy, instead of suppressing it, when the *dead body bill* was brought into parliament, and believe I was instrumental in producing its exit. I sent this short pamphlet to every member, and it has been since republished, at the end of my *Treatise on Dropsy*, &c.

At the time I was in the service, there were several practical and experienced surgeons, and their assistants, who, on peace, were discharged, without any adequate recompence for their merited services. The superannuated retired with a stipend, not equal to the earnings of a low mechanic. Their absence abroad prevents their making useful land connexions. It is hoped their situation will be a subject of parliamentary discussion and remuneration.

MILITARY CARD.

This subject shall terminate with the military card, addressed to the Royal York Mary-le-bone Volunteers, and to the rest of the defenders of their country, at this important period, in order to preserve their health, while in service of their country.

“ Having been in part of the seven years war, from 1760 to 1764, in Europe, Bellisle, and the West Indies, Havanna, America, &c. a small pamphlet was published, presented to His Most Gracious Majesty, in 1775, called *Medical Advice to the Army and Navy*; but as that small work was particularly adapted to hot climates, the present card is intended to preserve the officers and soldiery from the diseases most common to camps and armies in Great Britain. Near fifty years experience in the medical profession, may entitle the author, he hopes, to attention; and he is certain, the short hints annexed, will be useful to those, who, through inadvertency, might become the victims to changes of air in this climate, especially if unaccustomed to the military profession.

AUTUMN AND WINTER.

1. Wear Jersey shirts, or flannel waistcoats and drawers next the skin; but in *spring* and *summer*, cotton, or calico.

2. Keep the feet as dry as possible, and warm, by worsted stockings, strong shoes, or boots, occasionally waxed or oiled.

3. In the night, always wear a double cotton or worsted night cap, or a welsh woollen, wig either in camp or cantonments.

4. Those who are out on duty in the night, either in the open air, or under cover, should keep up gentle exercise at their posts, wear great coats, particularly in damp and rainy weather, and never rest until relieved.

DIET.

5. Bread, meat, and potatoes, give and preserve robust muscular strength. Greens and fruits should be sparingly used, lest they produce fluxes, and debilitate, &c.

DRINKS.

6. Good malt liquor well hopped, is excellent, but in cold weather, much rain, or moisture, an addition of a little brandy, rum, or gin, will be expedient; but excess of all kinds should be avoided, and above all things, *intoxication*, which would destroy the constitution, and disgrace true military discipline.

7. Smoking tobacco, in field duty, or otherwise, in cold or moist weather, and in the night, is useful, and an excellent preservative.

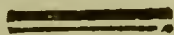
8. In case of inflammatory fevers, pleurisy, inflammation of the lungs, or acute rheumatism, which are common camp diseases, the most effectual treatment is, to bleed freely and blister, to give James's Powder with calomel, or solutions of antimonium tartarissatum with nitre, saline cathartics, &c. to evacuate, cool, and promote free perspiration.

Agues or intermittent fevers, after a cathartic is speedily cured by bark and vitriolated zinc, or bark powder, elixir of vitriol, &c.

9. In case of putrid infections, or feverish low diseases, the reverse of the inflammatory practice is to be adopted; for bleeding and saline cooling remedies, in such cases, destroy life; therefore to be avoided. The grand remedies for putrid infectious fevers, are, the *acid of vitriol, bark, snakeroot, and warm cordials*, without any regard to the heat, thirst, or rapidity of the pulse, from the commencement of these diseases to their termination. The success of which practice has been amply proved in thousands of instances, at the St. Mary-le-bone Infirmary, where, for years, we have not lost five or six in a hundred, in the most malignant putrid fevers, scarlet fever, confluent small pox, and other putrid contagious affections. This practice, therefore, cannot be too universal.

These medical hints may be useful to young practitioners, untainted by false systems and erroneous practices, as likewise the adoption of the concealed gun-shot seton needle passing through a tube in penetrating bullet wounds, &c. requiring counter-opening, instead of those large dilatings, or free incisions, so warmly recommended by the late celebrated Mr. Ranby;
by

by which means, the integuments and other parts were greatly injured, and cures prolonged, exclusive of the inhumanity of the practice.*



ON THE
PESTILENCE OR PLAGUE.

THE highest and most calamitous putrid disorder is the PLAGUE, or PESTIS.

If any learned physician, who has studied to join true medical reasoning with long experience, should peruse the treatises on the plague, he would be struck with astonishment, at the

K 3

paucity

* It is hoped these short rules, dictated by a zeal for the service of the King and Country, will be accepted with candour, and not receive censure on account of their brevity.

With regard to rules for *cleanliness* in ships; forming encampments in lofty places in hot climates, &c. my medical advice may be consulted by officers and commanders in the *army, navy, or East-India Company.*

paucity of useful doctrines, and the superabundance of irrational conceits.*

Ela-

* I have two volumes on this disease, containing an immense number of pamphlets, written within one hundred and fifty years, which except repetitions of descriptions, are of little, or no value as to any curative information.

1. Orders of the Lord Mayor and Aldermen, 1665, &c.
2. Directions of the Royal college.
3. Dr. Hodges's letter.
4. Reflections on the bills of mortality, from one thousand five hundred and ninety-two, to one thousand six hundred and sixty-five.
5. Of the plague at Naples, of which there died in one day twenty thousand persons.
6. A preservative for the plague, by Dr. Willis.
7. Dr. Mead on the plague.
8. His doctrines exploded.
9. Distinct notions of the plague, by the Explainer.
10. Discourse on pestilence, &c.
11. Second discourse, &c.
12. Another discourse, by a lover of mankind.
13. A Treatise on the plague, &c.
14. Treatise, by Dr. Strother.
15. The proper method to be used in the plague, &c.
16. The prevention of the plague, by J. Lyons, which consists chiefly in *burning sulphur*.
17. Dr. Colbatch's scheme, &c.
18. Observations of the above, by the same.
19. Dr. Pye's against Dr. Mead's opinions.
20. Another from the same author.

Elaborate disputes for this century past,
amongst physicians, who never saw the disease
appear,

21. A Treatise, by *Diemerbroeck*, Professor, on the plague of the Netherlands, 1722, with some sensible remarks on causes, but defective in cure, &c. He smoked tobacco.

22. *Mackenzie* likewise has written on the plague, and recommends bark and bleedings, which latter, he says, the natives of *Aleppo* and *Constantinople*, wisely objected to, where it, annually, more or less, makes its appearance.

Dr. Russell has likewise written an elaborate Treatise on the same subject, and is very circumstantial concerning its origin, progress, and fatality; but does not demonstrate any decided practice in the cure.

The Turks cannot drink wine, or spirits, being forbidden in the *Alcoran*, by *Mahomet*, &c.

It may be remarked, however, that *Potterius*, two hundred and fifty years ago, recommends the *acid of vitriol* in pestilence. *Minderarins* declares he would not attend the plague, if he had not oil of vitriol. *Mead* says, the plague is of foreign origin, and recommends *snakeroot*. In *France* they bled, and repeated it every four hours, in large purple blotches, &c. the most evident marks of commencing gangrene. Could the disorder prove otherwise than fatal? *Sydenham* bleeds and cools, and recommends ridiculous remedies, according to the fashion of those times.

The only excellent preservative; the only effectual remedy has been strenuously recommended by the chemists for near three hundred years; but the Galenic sect was so vehement, for centuries, against chemical remedies; that their introduction was effectually retarded, or so violently opposed, that no one, of any College, dared to prescribe the only valuable remedies the

appear, enquiring, whether the disease be *contagious* or not; whether it may be brought from one country to another in *wool, cotton, curtains, beds, cloaths, &c.* whether the infected infect others, and a variety of other questions of little importance to the principal points of cure.

The writers, generally, leave the subject where they found it; some affirming, some denying, others raising frothy hypotheses, and others pulling them down, merely, for the sake of contention. Disputes can only arise on matters of *opinion*, and opinion proves nothing; *facts* are every thing.

HIPPOCRATES observes, in his Epidemics, the constitution of the AIR, which preceded fevers and the plague; to be GREAT HEATS attended with much RAIN and SOUTHERLY WINDS. He recommends *great fires* to purify the air
and

art ought to be proud of. In my own time, I have seen the most violent and determined opposition to *antimonials*; *mercurials*; and lastly, *James's power*, which millions living have reason to bless; for the service it has been to society, under proper and skilful restrictions. The most important medicine, the oil of vitriol, has shared the same fate, from radical prejudices in the minds of physicians, otherwise highly respectable.

and destroy contagion ; and, few improvements have been added for two thousand years, except lately.*

THUCYDIDES the excellent and celebrated Greek historian describes the plague at *Athens*, and the symptoms are as accurate as in any writer who has appeared since.

It may be observed, that what I formerly wrote on putrid diseases, corresponds with the ancients, in all the destructive affections of hot climates. They originate in a putrefactive atmosphere, from heavy rains, heat, destruction of insects, reptiles, and human bodies left on the field of battle to putrify. The effects of animal and vegetable putrefaction may be seen in *Schola Medicinæ*, towards the latter end, according to the improved and useful discoveries of recent chemistry, added to practical observation.

The *pestis* or *plague* in every age, ancient or modern, in *Athens*, *Rome*, *Egypt*, *Persia*,
Turkey,

* By Dr. Russell and a few others. See the history of physic in *Schola Medicinæ*, in English, where will be found an abridged account of the writings of the great father of physic translated from the Greek, &c.

Turkey, Italy, or Africa, &c. are all similar in their causes, and destructive effects.*

Millions of the ancients, and millions of the moderns have fallen a prey to the destructive disorder, this scourge of the human species.

Descriptions are accurate ; but attempts to cure and counteract the corrosive poison, futile in the extreme, superstitious, irrational and tainted with such vicious folly and credulity, if examined in a medical view ; that the writings can be scarcely perused with any degree of patience, much less with useful information, a few circumstances being excepted.

The modes of prevention ; the shutting up the sick close in their houses ; the absurd conceptions of committees of health, unacquainted with the true principles of the medical art, all,
or

* My worthy deceased friend Mr. Devizon our consul at Cyprus, and afterward at Aleppo, gave me many accounts of the destructive locusts. which appeared at certain seasons, and certain years ; which they chased and took in immense heaps, in the very act of destroying the corn, &c. He attributed the plague to filthiness, a disregard to reasonable preventives, and putrefactive air.

or most, must increase the evil, spread the infection, instead of retarding, opposing, or conquering its rapid progress, by rational and effectual antiputrescent remedies internally, and by the purification of the contaminating air, by the excellent, or similar modes recommended by the most recent and improved art of chemistry.

It is not surprising, in the regions where these diseases predominate, that such devastation is the consequence; a confidence in amulets, charms, talismans, or superficial and superstitious remedies not capable of attacking any formidable disease, are in great repute, and the utmost confidence is reposed in the *Alcoran* and predestination, to the entire disregard of the most excellent precepts of refined modern physic.*

At *Aleppo*, ninety thousand unfortunate people perished by the plague in six months. Every year, more or less, thousands die of the *pestis* or plague, in different parts of the Turkish dominions; but lately it has travelled nearer to the British empire, or a disease similar in destroying, rapidly, the human species.

The

* In a work, called a *history of air*, is shewn the dreadful havoc in every age, of the plague, &c. we read of 90,000 having perished at *Damietta*, &c. &c.

The actual success of curing *typhus putrida*, as it has been injudiciously called, or *febris putrida petechialis*, or purple putrid fever, it is hoped, will awaken the attention of those states, where the more exalted putrid affections rage with such fatal violence, and induce them to abandon irrational expectations of safety or relief from irrational talismans, &c.*

As to the plague, were it ever to appear in this country, I should be under little apprehension of subduing it; provided, I could have the power of building places in lofty airy situations of a similar structure with the St. Mary-le-bone infirmary, with a few additional improvements.

It should be from experienced practitioners, who have not run into wild chimeras, that we should improve practical science. Dr. HODGES, who weathered the storm in London, in

* I have lately had a curiosity of this nature, presented to me by my worthy friend Dr. Ruddiman, formerly, many years physician to the East Indies:—A very intelligent physician, who knows the excellent effects of *antiputrescents* in that hot climate. The talisman is a gold dragon, enamelled, richly set with pearls, which hung on the bed of Tippu Sultan, who died bravely, defending his capital Seringapatam.

in 1665, when the *plague* destroyed so many thousands, and when Dr. SYDENHAM ran away from the seat of misery, declares, that BLEEDING was injurious and destructive. Indeed, the records of those times, except in that instance, had best be buried in eternal oblivion; they do not demonstrate any solid erudition, but puerile expectations from a ridiculous farrago of trifling, or overcharged prescriptions; which would excite the risibility of even the lowest orders in medical departments, and pity in the minds of all who possess sensibility and universal benevolence.

Since I wrote my former Treatises on Contagious Fevers, their causes, effects, and treatment, additional and important information has been published by the celebrated *M. Morveau*, at Paris, and the humane and intelligent *Dr. Carmichael Smith*, on the best modes of preventing putrid contagion spreading, and correcting its destructive effects in apartments, hospitals, jails, &c. &c.

The processes, in some respects, are simple to men of science; but like, what I formerly recommended of the union of the muriatic or nitrous acid with alcohol, for purification of
L
air,

air, not so fit for private families, and therefore less useful for public utility.*

The

* It could be clearly proved in addition to various experiments very sensibly introduced by Dr. Carmichael Smith, and Morveau.

1. That the infectious particles producing putrid fevers, are highly *alkaline, corrosive*, and almost *caustic*.

2. That they float in the atmospheric air in *flocculi*.

3. That they ascend, being lighter than the air we breathe.

4. That from most putrid substances they only exhale for a *given time*, though in apartments they may remain stationary, or may be dispersed by a stream of wind.

5. That they do not ultimately *mix* with *atmospheric air*; but are buoyed up in certain divisions of particles.

6. That the true healthful atmosphere air, when saturated with its proper *compound* particles, will not easily unite with any foreign body; though carbonic acid gas, or fixed air, by its ponderosity may descend, being one and a half heavier than atmosphere air; that in the descent of the latter, or ascent of the former, trees, and other vegetables, may be *blighted* in certain directions. yet the whole air is not contaminated. Human beings may likewise partially suffer.

All these assertions might be fully proved, but the present moment requires instantaneous action; not deliberative desultory contemplation.

It might likewise be proved, from these sources, how courts of judicature, or any public places, as the House of Lords, Commons, and all courts of justice, ought to be constructed, to prevent *contagion* from the assembly of an immense number of persons

The facility, however, with which the apartments, wards, hospitals, ships, jails, &c. may be purified, and the noxious infected *putrid particles* that *spread contagion* destroyed, merit the attention of all practitioners; both for their own, and the public safety.

These improvements, then, originating, in that excellent art chemistry, destroying the *external* infecting causes surrounding the sick, may be united to my *internal*, and successful practice; from which, it is sincerely hoped, that we shall no longer hear of the many thousands infected and dying of contagious diseases. The remedies should be applied spiritedly, in the first instance of supposed disease, and I will be answerable, success will often follow. If practitioners become mere spectators, or pursue erroneous methods of treatment, DEATHS, as too usual, instead of RECOVERIES, must be

L 2

the

persons in a small space of room, or contracted building. Even all society might benefit, and the rooms, even of routs, assemblies, balls, &c. might be rendered less liable to injurious, and sometimes fatal exhalations, &c. &c.

It may be observed, that the hotter the season, or climate, so much the more dangerous is putrid infection. Intense heat expands and extends, whilst cold or frost contracts the *putrid particles*, and sudden changes from cold to great heat, are dangerous.

the inevitable consequence; and if fatality happen in some instances, far the greatest number may be SAVED by proper treatment.*

If the assertions here advanced, if the proofs already established, by numerous London Physicians, and others; if the observations of a practitioner, who has been early initiated into the observation of bedside hospital practice; who has seen the diseases of every climate; received, as formerly practiced, the indigent
at

* The process of *Dr. Carmichael Smith*, is pouring acid of vitriol, or sulphuric acid, on powdered nitre, &c. in short, producing nitrous acid fumigation, &c. &c. They have been successfully used in our navy.

The process of *Morveau* is, pouring acid of vitriol, or sulphuric acid, on common salt, in a pipkin, or glass goblets, or tumblers.

The most powerful destroyer of putrid contagious particles, is the following: according to the latter author.

		oz.	dr.	gr.
Common Salt	-	2	2	10
Black oxyd. of manganese		0	5	17
Water	-	1	2	33
Sulphuric acid	-	1	7	50

Triturate the salt and maganese, put them in a glass or stone vessel, add the water and the sulphuric acid all at once in uninhabited chambers, but at twice in wards with sick.

The experiments of these excellent improvers seem conclusive; but in general, the processes should be conducted by hospital or naval surgeons assistants; in town, by pharmaceutic practitioners. Whether these methods answer in warmer climates, remain to be proved; but is hoped, they have not been neglected in *Spain, Gibraltar, Leghorn, &c.* where so many thousands have perished.

at his house, for a period of twenty years, and who, afterwards, exclusive of immense private practice, has been physician near twenty years to an hospital, as extensive in seeing numerous patients, as any in London, or, perhaps, in Europe, especially in admitting *putrid fevers*, &c. cannot avail with those who have had few, or none, of those advantages, and who are daily, from false doctrines pursuing erroneous modes of treatment, to the injury of society; probably the following table may have some weight. It is by a comparison of *bad* and *good* practices, and their effects, *fatal*, or *prosperous*, that should settle all controversy, on such an important subject.*

L. 3

DESTRUCT-

* The scenes of the wretched in *Cadiz*, and other parts of Spain, Gibraltar, Leghorn, &c. have been tragic in the extreme. Parents, with flowing tears, deprived of their children; children of their affectionate parents, in incredible numbers. Many who escaped from the places of horror and devastation in vessels, at a most enormous expense, have been thrown about by the waves of the sea from port to port, all which were shut against these truly wretched. Numbers, in consequence, have suffered shipwreck, and the unfortunates have perished. The inexorable sea has proved more kind in terminating their miseries, than the inhospitable shores, where, in vain, they sought relief, or an asylum. Their woes have been inexpressible, and it is left to feeling humane friends to figure to themselves the various horrid sensations, the truly pitiable sufferers must have experienced, in being *deserted by all the world!*

A PARALLEL OF ILL AND GOOD PRACTICES.

DESTRUCTIVE MODES.	EVENTS.	SUCCESSFUL MODES.	EVENTS.
I. Bleeding admitted or repeated.	EIGHT out of NINE died at Gibraltar by the Demerara dose.	I. NEVER to BLEED.	EIGHT out of
II. Calomel and jalap, or the Demerara dose, as it has been called, of 30 grains of jalap, and 10 of calomel.*		II. Acid laxatives of tamarinds, cremor tartar, rhubarb, and aromatics.	TEN recover in
III. Vomits, or saline purges.		III. Pure air in a continual stream.	Europe; and in
IV. Diaphoretics.		IV. Bark, and acid elixir of vitriol.	the hottest cli- mates, SIX or
V. Nitre, or neutral salts.	EIGHTY in	V. Bark, in substance, or in ex- tract, formed into a syrup, with an addition of acid of vitriol.	SEVEN out of TEN infected,
VI. Calomel and opium.	ONE HUNDRED, under the		
VII. Brandy and wine in super- abundance, or by the Bru- nonian fatal system.			

VIII.	bleeding plan,	VI.	by an early and
Lemonade and nitre.	and other per-	Fluxhams tincture of bark, and elixir of vitriol.	prompt appli-
IX.	verse antiphlo-	VII.	cation of the
Camphor mixture and Min-	gistic methods,	Madeira wine, decoction of and powder of bark, and	<i>antiputrescent</i>
derarus's spirit.	singly or con-	snakeroot, with acid of vitriol. Cascarilla.	plan, pure air,
X.	jointly, have	VIII.	&c. and by giv-
Saline clysters.	died, in a short	Camphor, in strong solution with Hoffman's anodyne	ing the reme-
XI.	space of time;	liquid and tincture of snake- root.	dies before the
Blisters.	few escaped the	IX.	horrid symp-
XII.	infection.	Confectio opiatâ in purgings, if debilitating.	toms appear.
Superstitious remedies, as in the plague, &c. consisting of plague water, amulets, charms, and trifling ineffi- cacious medicines for any important disease.			

Nine persons at *Gibraltar* took this *Demerara* dose, eight of whom *died* of the fever, &c. &c. This comes from respectable authority.

I have seen, in my travels all the practice of most of the hospitals in Europe, and have plans of their architecture. I have examined the practice in *France, Holland, Flanders*; in *Italy, &c.* as at *Naples, Venice, Rome, Padua, Turin, Bologna, Florence, Leghorn, Marseilles, &c. &c.* in all which places, may be seen an inefficacious practice; or the application of bleeding, refrigeratory medicines of nitre, &c. of consequence an enormous fatality happens; where if they pursued more rational methods, thousands, annually, might be preserved.

As to the modes of treatment here adopted, they are so well known with their superior success, to a numerous host of practitioners in the art of medicine, in London, that it would be superfluous to urge a sentence more on the subject; except for the benefit and safety of human society, an ardent wish, that they may be universally practiced.

Phren-

* One of the shocking and striking errors of those who class medicines under general or particular heads, is arranging *neutral salts* with antiseptics, *bark, &c.* such destructive arrangements carry deaths in their very countenances, and it is no wonder the inexperienced may commit the grossest errors from such school doctrines; so contrary to practical science.

Phrenitis putrida.

Though sufficient hath been written on these subjects in the three treatises already alluded to ; yet extracts from the *causes of deaths in putrid fevers*, may be here introduced, as corroborating proofs of the doctrines advanced on the incongruity of saline *mixed* practices ; which may be either read, or omitted ; being only repetitions of the *medical* advice, putrid sore throat, &c. &c.

Many have, within these few years, come into the infirmary with the *phrenitis putrida*, a disorder hitherto not observed by any medical writer except myself.

The *phrenitis putrida* is a *febrile delirium*, from bad putrid infection, which occasions violent mental ravings from the first moment of the attack, soon accompanied with a *brownish tongue*, depressed quick pulse, &c.

It is distinguishable from the common *febrile deliriums* ; because these, in general, come some few days after the fever has been present ; but, in the *phrenitis putrida*, the disorder commenced with delirium, and immediately shewed a brownness on the tongue, and purple spots, &c.

It is distinguishable from the inflammatory phrenitis of the strong and plethoric, because in these, the surface of the tongue is dry and whitish in the beginning, the face is florid, the eyes staring, wild, vivid, and inflamed, and often accompanied with strong, full pulse, and other symptoms of true inflammation.

Treat-

Treatment.—A strait waistcoat was applied to secure the patients in bed, and to prevent them doing themselves, or others, mischief.

They took, first, the antiseptic laxative.

Then the camphorated mixture, with the *antimonium tartarizatum*, was commonly given during the night, when there was a considerable exacerbation of the symptoms and perspiration.

They were sometimes blistered.

The *bark* and *acid* mixture was commonly given from the beginning, if no circumstance forbad its use; and many afflicted with this *putrid phrensy*, by very little else than the antiseptic mixture, in two, or three weeks, more or less, were perfectly recovered.

The *phrenitis nervosa*, or nervous, febrile phrensy, under which a great number formerly laboured, with the white, moist tongue, low fever, &c. has been cured at the infirmary, by the same methods, and likewise the nervous fever.

Small-Pox.

The confluent small-pox has been generally treated in a similar manner, when *purple petechiæ*, spots, or *brownish tongue*, appeared. The practice has been constantly attended with extraordinary success, even amongst *pregnant women*; and I am convinced, that very few would die of the *confluent small-pox*, if the
antiseptic-

antiseptic plans already mentioned were always applied in the commencement of the disease.*

The causes alluded to, so successfully treated in the *St. Mary-le-bone Infirmary*, were the *natural* small-pox, with *purple spots, brown tongue, &c.* but I am of opinion, that all ill success would be infallibly prevented in this disease, by the use of the vitriolic acid on the first appearance of the small pox.

These indisputable facts and methods of treatment have been communicated to induce practitioners in medicine to depart from injurious prejudices.

After comparing the *fatality* of the *common* methods of treatment with the present success; after it has been ascertained, that from *sixty* to *eighty* die out of every hundred by the common erroneous treatment, as practised by almost all the physicians in Europe; and that above *ninety*, out of every hundred, recover in the worst species of the putrid fever, when treated in the beginning by the bark, acids, &c. and by avoiding all *saline remedies*: it is pre-

* Many years ago a fire happened at *Blandford*, in Dorsetshire, which consumed the town; amongst the sufferers, were above thirty persons, afflicted with the *small-pox*; they were accommodated with cots or hammocks, or by other means, under the bridge, lying, openly exposed in a stream of cold air, and they all recovered. This history I had from my friend John Tucker, Esq. Member for Weymouth, formerly; a striking proof of the utility of a continual-fresh stream of air in malignant infectious diseases.

presumed, no person will be so criminally obstinate, as to continue methods that prove destructive to the human species, in contradiction to those modes that may annually *save thousands*.

I should not appear thus strenuous, were not the subject very important, and were I not convinced, that it is difficult, very difficult, to remove radical prejudices. These sentiments will be considered an attack on numbers of medical practitioners; for some will take offence at any improvements whatever. There is nothing to apprehend, if they persevere in error; but the injury done to society; for the facts are irrefutable, and the new methods cannot be too soon universally received; nor the erroneous old doctrines, commonly practised, too soon exploded and buried in eternal darkness, never more to destroy human beings.

It may be necessary, previous to quitting the subject of putrid-tending, infectious diseases, &c. to produce a list of medicines prescribed by the most approved writers in medicine. The remedies here exhibited, are, in many instances, useless, absurd, injurious, or absolutely contrary to the intentions of cure, or a mixed practice prevails.

From Sydenham's Epidemics of 1661, 1662, 1663, 1664.

Symptoms.—Great faintness, vomiting, *dry and black tongue*, great and sudden loss of strength, a dryness of the external parts, &c.

Bleeding not to be omitted without danger, in young people.

An emetic in the morning.

An opiate in the evening.

Cordials.

Waters of borage, citron, black cherries, compound scordium water, barley cinnamon water.

Prepared pearl.

Gascoign's powder.

Lapis contrayerva.

Leaf of gold.

Treacle water.

Seeds citron.

Syrup of cloves, &c.

And an abundance of such insignificant trifling practice.

For poor Persons.

Bleeding.

Vomiting.

Water, or barley gruel.

Warm small beer.

The application of the *heat* of a *strong, healthy young man*.—Was there ever any thing conceived more absurd?

Distilled waters of purslain and wild poppies, and syrup of white poppies, syrup of cowslips.

The rules recommended by the Royal college in 1665, in the plague, &c. are equally inefficacious. A farrago of absurd remedies extracted from absurd credulous authors. They were *Galenists*, and would not admit any excellent *chemical* remedies, as oil of vitriol, antimonials, &c.

*In the inverted motion of the Intestines, or
Iliac Passion.*

Salt of wormwood and lemon juice, mint water.
A live puppy to be applied to the belly.

In the Plague or pestilential Fever.

Bleeding plentifully.

Dissipating the *pestilential ferment* by sweat.

Venice treacle.

Gascoign's powder.

Cochineal.

Saffron.

Juice of Kermes.

Distilled water of *carduus benedictus*.

Scordium.

Treacle water, and sprup of cloves.

Sweating.

Sydenham appears to have been more a *spectator* than a *curer* of these disorders: the chemists of his time were much greater practical physicians; but it has been the fashion to praise this author, and all his absurdities, even to this present moment, though the most uninformed apothecary would be ashamed to follow his prescriptions in many disorders of which he treats in this enlightened age of science.

Febris ardens, &c. from Boerhaave.

Demulcent aqueous drinks.

Bleeding.

Diluting clysters, cooling, &c.

Medicamenta aquosa, blanda, *nitrosa*, &c.

Boerhaave

Boerhaave attempted to harmonize and unite all the sects of medicine : he wrote before he had seen much practice, and therefore he has tacked together the galenical, chemical, the pretended *sectatores naturæ*, the mathematical, the geometrical calculators, the mechanical, the humoral, *Lewenhœckian*, and whatever he found plausible, The aphorisms are an astonishing production of collected doubtful systems in one *focus*, and manifest superlative ingenuity : but what is most astonishing and to be lamented, they fascinated all the medical profession for half a century, and even to this present time ; a proof how few think for themselves, or believe their own eyes.

From Hoffman.

Emetics.

Alexipharmics.

Bezoardics.

Bleeding.

Blisters.

Elder flower water.

Waters of limes.

——— *Scordium*.

——— *Scabious*.

——— *Carduss benedictus*.

Juice of roses.

Powders of a diaphoretic antimony.

——— of mother of pearl.

——— Crabs eyes.

——— Amber.

——— *Terra sigillata*.

——— Burnt hartshorn.

Pure nitre.

Essence and extract of Scordium.

Vincetoxicum.

Dulcified spirit of nitre.

Decoction of scorzonera.

Shavings and jellies of hartshorn.

Orange flower water.

French oil of citrons, with sugar.

Confection of alkermes.

Balsam of life.

Essence of castor.

Cinnabar.

Succinated spirit of hartshorn:

Bezoardic powder, nitre and camphor.

Outwardly to the stomach, venice treacle, camphor, with spirits of wine, and sal ammoniac.

Oil of rue and lavender.

Hoffman was the most learned and best reasoner of his time ; but his practice was often puerile, and tinctured with a vicious credulity on the supposed efficacy of inactive medicine.

From Huxham.

Bleeding.

Vomits.

Bark and salines, acids, &c.

To allay Vomiting.

Venice treacle in salt of wormwood mixture.

Juice of lemons, mint water.

Clysters of milk sugar and salt.

Laxatives of manna.

———— Sal Polychrest.

———— Glauber's salts.

Diarrhæa

Diarrhœa or Dysentery to be restrained by

Theriaca Andromachi.
Astringent alexipharmics.
Confect. Fracastorii.
Blisters, in the decline.

*From Sir John Pringle, late Physician to His
present Majesty.*

Vomits, then a bolus of theriaca, with salt of hartshorn.

Bleeding.

Contrayerva powder and nitre.

Spiritus Mindererii.

Spirituuous waters and salt of hartshorn, bark.

In Recovery.

Pil. Matthæi.

Ten grains of asafœtida bis de die.

From Lieutaud in France.

Recommends antimonials, and observes, Sydenham said, “ that *malignity*, when applied to diseases, had slaughtered more than *gunpowder*.” I am concerned to say, that more have been slaughtered by *erroneous medical practices*, than by the sword.

From Monro.

Rhubarb or salts.

Emetic in the evening, a purge the next day.

Saline

Saline draughts, with the pulvis contrayerva.*

Afterwards cordials are united to the saline.

This author, however judiciously recommends a free use of the bark.

If *Fox's* formula, collected for above thirty years from the practice of the most esteemed London physicians of the court, or otherwise, be examined, there will appear a very inefficacious practice in fevers. Contrast these with the present information!

Strange mixtures of contrayerva.

Bezoar.

Castor.

Theriaca.

Syrup of saffron.

Vomits.

Nitre.

Cordial confection.

Valerian.

Asafoetida.

Sal succini.

Rhubarb, James's powder, and asafoetida.

Tartarum vitriolatum and pulv. e chel. crancor. comp.

Flowers of chamomile and rose water, and a number of elaborate prescriptions, often futile, and in many instances contrary to the rules of chemical union: but, as the authors are no more, may their prescriptions be buried in peace!—They followed the prejudices of the day, and in *putrid fevers* must have frequently done much mischief.

Mead,

* Gascoign's powder and compound contrayerva powder, bezoar, &c. &c. are all inefficacious remedies, except for acids in the stomach.

Mead, in Cure of the Plague.

Light emetics.
Bleedings.
Sweating, &c.
Snakeroot.

Baron Storck of Vienna, Dr. Lind, Dr. Trotter.

In general, these authors well understand the use of the *cortex* in petechial fevers, acids, &c.

De Haen.

Neutral salts, as
Sal nitre.
— prunella.
— polychrest.

Home.

Bleeding.
Vomiting.
Diaphoretics.
Bark, &c.

Gregory.

Antiphlogistic regimen.
Emetics.
Diaphoretics.
Bark, &c.

Cullen.

Diluents.
Neutral salts.
Sudorifics.
Emetics.
Bark, &c.

Such have been the erroneous practices of physicians, who are quoted as the *highest authority*, for the direction of all practitioners in medicine.

Though there be in the antecedent list of remedies, many that certainly are improper in the cure of putrid, contagious, or malignant and petechial fevers; yet in the authors cited, several *useful observations* and *rules* may be extracted, which, however, require no small share of medical sagacity to select from the dangerous, or useless.

Some

Some of the remedies are ridiculous, others, in certain cases, may not be very exceptionable, but the incongruity of repeatedly bleeding, sweating, or giving cooling salts, &c. in hospital infectious petechial fevers, that generally require the *immediate* use and continuance of the bark, after the intestines have been opened, must appear obvious. The success, however, attending the fortunate plan of treatment here delivered, is the greatest argument in its favor, and on that alone it is offered, as worthy of the attention of physicians and the public in general. It must be observed, that numberless practitioners through want of information, or other causes, continue *bleeding, sweating, purging, and cooling*, or giving some one or other of the remedies censured; not reflecting on the mischiefs arising to society, and they may stand excused, in a certain degree, because they follow the doctrines and practices of many esteemed authors. It is manifest, the best writers have been erroneous in the particulars enumerated, yet very excellent in the treatment of some other disorders; and though it may be very laudable to embrace their beauties; yet it is highly dangerous not to discover and avoid their fatal errors. All partiality, or undue respect for persons, however elevated by merit, or fortuitous circumstances is highly criminal, when SALUS POPULI becomes the object of medical discussion. All idle ceremony should be waved, and TRUTH should appear, and be protected in all her splendid lustre.

CON.

CONCLUSION.

I.

THUS terminates an original medical work, with extracts from the former medical productions, dictated by an ardent zeal for the service of the Army, Navy, and all human society.

II.

A very small part contains the opinions of other physicians, and that, frequently to expose errors; the errors of preceding authors, or medical professors, and in other respects, their excellence.

III.

The object of the work is, an attempt to banish, from the medical art, *in toto*, all dangerous doctrines, or mixed incongruities, both of theory and practice, in every species of putrid infectious disorders.

IV.

The whole is founded on my own long experienced success, united to the most eminent practitioners in London, under the guidance of anatomical, physiological and pathological reasonings and facts. The doctrines are illustrated, not by hypothetical conceits, nor doubtful plausible systems; but by dissections, actual dissections of human bodies after death, made by myself, or in my presence, for a period of above forty years. Those, who have not
pur-

pursued this course of disagreeable study, as it is called, know little of its importance.

V.

Practical, and conclusive arguments and facts, drawn from the evident practice of surgery, are produced, as illustrative of the veracity and utility of the doctrines advanced.

VI.

Surgeons attack livid appearances or purple blotches, gangrene, &c. with energy, not by *bleeding* and *saline* coolers, purges, nor nitre; but by the *bark* in *substance*, *vitriolic acid*, *cordials*, *snakeroot*, and *spirituous bark* tinctures, &c. Thus they treat and cure external mortification.

VII.

Is not mortification a cessation of arterial action from putrid causes? Can any reason be given why the remedies that succeed in external gangrene should not be spiritedly applied in a rapid internal tendency to putridity? Certainly not. They should be prescribed with greater earnestness, and repeated oftener, and then they will succeed, as they have in thousands of instances.

VIII.

This decidedly proves, what has been often inculcated, the necessity of physicians and medical professors well knowing, or observing, the practical art of surgery: for, by seeing the different state of wounds, ulcers, &c. in different constitutions, ages, sexes, climate, &c. and by well comprehending what

remedies correct various morbid and putrefactive causes, they succeed in their cure, not by false systems formed in the closet, but by actual practice at the bedside of the afflicted, or wounded, &c.

IX.

Therefore, it is a clear evident proposition, and no analogy in medicine can be more complete, than what succeeds in gangrene, livid appearances, &c. must be the direct method of curing all threatening internal mortifications, which happen in every species of putrid contagious fever and affections. Success attends it, the theory and practice correspond, and are complete.

X.

That when any contagious putrid fever is present, the remedies which cure, should be immediately applied to those who are not even infected; for it stands to reason, that a smaller degree of infection is much easier remedied than a greater, and this likewise could be proved in thousands of instances in families, &c.

XI.

The *inflammatory* and the *putrid diathesis*, so opposite in their causes and effects, have been pointedly ascertained; so that no future fatal mistakes can happen, in treating one disorder for another. Gun-shot Wounds, and the Plague, have likewise been considered, with improvements.

XII.

From all which, it must evidently appear, from

dissections, reasoning, and experience, that any species of *putrid disorder, fever, the plague, gangrene, livid spots, &c.* cannot be worse treated than by *bleeding, nitre, cooling purging salts*, or even a contradictory *mixed practice*; nor never better counteracted, than by first removing intestinal causes, and then resisting threatening putrefaction by acid of vitriol, bark, snakeroot, cascarilla, cordials, and every species of antiseptics, by purification of air, and strict cleanliness.

XIII.

The European Physicians, who have never travelled from Great Britain, or other northern climates, to the flaming regions of the West Indies, Africa, or South America, can scarcely conceive the rapidity and violence of highly putrid malignant fevers, which, in hot climates, spread so vehemently their baneful and destructive influence. The cold practice of the North, will never effectually conquer the rapidity of diseases in the South. There is but a short space of time, from the most vigorous health and life, to sudden death. There is no time to be cold spectators, nor to speculate. All is fiery action, all requires prompt execution. The conceptions of physicians, should outrun the most hasty strides of putrid fevers; or deaths instead of cures, must always be the inevitable consequence! *In tempore, quod rerum omnium est primum.*

THE END.

J. Barfield, Printer, 91, Wardour-street.

DR. ROWLEY'S

OTHER

LATIN AND ENGLISH WORKS, &c.

I. *Schola medicinæ universalis nova Historiam, anatomiam, physiologiam, atque pathologiam specialem continens, cum 68 tabulis æneis auctore Gulielmo Rowley, M. D.* of which there is an abridged translation published. The Latin edition, in two volumes, price 4l. 4s —In English, 2l. 2s.

II. *The Rational and Improved Practice of Physic*, in four handsome volumes, octavo, price 1l. 11s. 6d. Interspersed with the author's numerous prescriptions, morbid dissections, &c. &c.

VOL. I.—Contains treatises on female, nervous, hysterical, hypochondriacal, bilious, and cancerous diseases.

Letters on medical vanity, and the abuse of hemlock, &c. in cancers, &c. with the cure of a cancerous womb, ulcer of the rectum, &c.

VOL. II.—On madness and suicide, convulsions and spasms, lethargy, apoplexy, and palsy; the different species of gout; and effects of the muriatic acid; new methods of treating the bite of mad dogs, &c.

VOL. III.—On one hundred and eighteen diseases of the eyes, with copper-plates, explaining the organs of vision, with all the chirurgical operations and remedies for removing blindness, &c. &c. The history and use of electricity in various diseases, with the course of the nerves, explaining the parts to be electrified, &c. with new ideas on pulmonary, consumptions.

VOL. IV.—On the cure of cold ulcerated legs without rest, &c. On the putrid malignant sore throat, with the mode of cure practised successfully at the St. Mary-le-bone Infirmary.

The

The causes of death amongst children in the scarlet and putrid fevers, &c. Medical advice to the army and navy, containing the diseases of soldiers, seamen, &c. with English prescriptions; on gun shot wounds, &c.

On diet, and on all the foods used in the world, adapted to invalids, different constitutions, ages, and countries, with their various applications in nourishing the body, &c.

III. A treatise on the causes and cure of swelled legs; on dropsies; and on the modes of retarding the decay of the constitution in the decline of life; with a copper-plate description of a new-invented instrument for drawing off the water in female dropsies, &c.

To which is added, a tract on the absolute necessity of encouraging the study of anatomy, &c. to supply the army, navy, and country, with skilful physicians and surgeons, &c. Addressed to the legislature of Great Britain, price 3s.

IV. The most cogent reasons why astringent injections, caustic bougies, and violent salivations in venereal affections, should be banished for ever from practice, with mild and experienced modes and prescriptions, for treating every species of the disease, either by mercury, or alteratives, with the history of the origin, progress, and present state of the infection, for the use of young practitioners, to prevent many evils lately introduced &c. and the management of urethral obstructions, &c. &c. price 4s.

V. A treatise on the *hydrocephalus*, or watery head of children, with many cases cured by early discovering the symptoms of that otherwise destructive disease, with diagnostics, prognostics, and remedies; to which are added, *precepts* on nursing, and short rules for preventing and treating infantile complaints; price 2s.

SHORTLY WILL BE PUBLISHED.

VII, A description of the famous APOTHEOSIS HOMERI, or deification of Homer, a curious antique sculpture, the sublime
per.

performance of ARCHELAUS of PRIENE, above 2000 years ago, dug out of the ruins of the palace of Claudius Drusus, 160 years since, placed in the palace of Colonna, at Rome, and during the French war, removed to London, where it may be purchased for 5000l.

N. B. The 1st and 2nd. volumes of the rational Practice of Physic, 15s. The 3rd volume, on the Diseases of the Eyes, price 8s. And the 4th volume, price 8s. separately, may be had to accommodate the purchasers of the former editions.



Medical Lectures, excluding false Systems.

DR. ROWLEY will RECOMMENCE his Course of Lectures on the Theory and Practice of Physic, on the first Fridays in *January* and *April*, and the last in *September*, annually, at Ten o'Clock in the Forenoon, in SAVILLE-Row, founded on the anatomical and other Demonstrations, published in his Latin and English SCHOLA MEDICINÆ UNIVERSALIS Nova, and, nearly Fifty Years extensive practical Experience and Observation.

First Course, THREE GUINEAS; Second, TWO GUINEAS; and the Third, ONE GUINEA; to be continued Mondays, Wednesdays and Fridays.

* * All Dr. ROWLEY's Medical Writings, &c. are to be had of J. HARRIS, corner of Ludgate-hill; Murray, Fleet-street; Cox, Borough; and of all Booksellers.

1. These Lectures are intended to illustrate, on true Principles, the whole Science of Medicine.

2. To explain the animal, vital, and natural Functions of Man, in a state of Health and Disease, exhibited by coloured Paintings, as large as Life, and by other demonstrative Facts.

3. All the Disorders of the Human Body, will be considered Anatomically, Physiologically, and according to the real Appearances of innumerable dissected Subjects after Death,
made

made by the DOCTOR or under his Inspection, &c. at the Hotel Dieu Paris, in private Practice, and the St. Mary-le bon Infirmary.

4. No Proposition, either theoretical, or practical, will be admitted, which cannot be fully proved by absolute self-evident Demonstration, or Experience.

5. All Hypotheses, Speculations, and Systems, either BOERHAAVIAN, CULLENIAN, CHEMICAL, BRUNONIAN, PNEUMATIC, or others, not fully proved by Experience practically useful, are rejected.

6. The MATERIA MEDICA, for curing Diseases, is select and efficacious, and all insignificant, doubtful, poisonous, superstitious, and emperical Remedies, are excluded.

7. Diseases are arranged according to their Nature and Cure, without mixing opposite Disorders in the same Class; &c. Logical Definitions expressive of Cause and Effect, are given in every Complaint as much as possible, and all obscurity avoided.

8. The internal Treatment of all Affections incident to the Human Body are concisely delivered, including Cases in Surgery and Midwifery. In short, it is intended to concentrate, as much as possible, the whole theoretical and practical Science of the healing Art, without having recourse to Error, visionary Conceits, or Falsehood; and to embrace nothing but absolute Truths, confirmed by Experience, Reflection, and unprejudiced Judgment. How far the Lecturer may be equal to the important Objects intended, must be left to the Consideration and Candor of the attentive and learned Auditors of the NEW SCHOOL OF MEDICINE.

